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JOHNSTONE & DUNCKLEE.

The North Devon Cattle.

In the two last numbers of the *Farmer*, a description was given of the improved Short-Horns, with some illustrations for comparison, and the list of points which was drawn up for the consideration of the State Agricultural Society of New York, by Francis Rotch, Esq., of Butternuts. In the present number we present the points which are deemed requisite in the North Devon breed of cattle, which have been drawn up by the same gentleman, and have been adopted by the same high authority, with a few remarks of our own on the fitness of this breed for the climate and soil of Michigan. To illustrate these points, and to show the perfection to which this stock of cattle may be bred to all the subscribers to the *Michigan Farmer*, we have procured at a very heavy expense, steel plate engravings of the finest imported bull of this breed that has ever been brought into this country. The portrait is so perfect, that it will give as good an idea of the several points referred to by the N. Y. State Agricultural Society that we are sure our readers will receive it in addition to the usual illustrations with as much satisfaction as we take in presenting it to them.

Youatt in his work on cattle, lays particular stress on the principle, that to breed with success, it is necessary that the breed should be suited to the soil and the climate; indeed he calls it "the grand secret of breeding." The Devon cattle presents some peculiar points that seem to make them well adapted to be bred in this State, with great profit. There are three great purposes for which a farmer raises cattle, to wit: for work, for the butcher, and for the dairy. In this State where the winters are long, and where much work in the various seasons, but especially in the spring has to be done hurriedly, the farmer is unwise, who does not raise cattle that cannot work quickly and which are not tractable and easily governed, and will bear to be hurried, without suffering in flesh, on ordinary feed. The farmer cannot afford it. The breed of cattle which we have now under consideration, stand foremost of all the varieties of improved stock for this quality. Mr. Colman, in his remarks on European Agriculture, says "they have the preference of all other breeds for the yoke, being strong, active, and of great endurance; add to this a remarkable docility and good temper." These cattle so far as they have been proved here, are quick at their work, are good travellers, and at some of the plowing matches recently recorded, we have noticed that they have done their work in quicker time, and have borne away the prize when worked against horses. Youatt states that four steers are calculated on to do as much work as three horses. In fact of all the breeds of cattle the conformation of the parts on which quick action depends is in them more like the horse than in any other, and one of the points adopted by the Society is that the shoulder should be "approximate in form to that of the horse." When we consider that large portions of this State is still covered with the forest, and every year, in every county, farmers and settlers are bringing into cultivation tracts of wild land, it will be admitted that smart working cattle are highly desirable, and that working qualities are a point to be considered in choosing a breed for this State. Indeed this has already manifested itself, for Devons are the only improved stock besides the Durhams that have borne off many prizes at the State fairs.

The Devons are also easily kept in condition, and

make a good return for the food they consume.—They are therefore valuable to keep for the butcher. Mr. George E. Pomeroy made a report in 1852 on his cattle, which he brought into this State some years ago, in which he says "I have come to the conclusion that the Devons keep on full one-fifth less feed than the natives, and I know full one-half less than the Durhams. They feed well at the straw stack, and thrive on marsh hay; and while they are *small eaters*, they are good feeders, standing the cold weather better than any cattle I ever saw." In 1852, Mr. F. V. Smith, of Coldwater, reported to the State Society of Michigan on the qualities of Devon cattle exhibited by him, and to which were awarded several prizes, and he says of their fattening propensities: "Their qualities for making beef are a great inclination to fatten, a rapid increase for the food consumed, small in the bone, with little offal. The fine quality of their beef, and its unusual proportion in the most desirable parts, and containing greater weight in the same superficies than any other breed, makes them eagerly sought after to drive to distant markets both for store and beef. Their capacity also enables them to stand the drift with less loss than other breeds.

Some writers on these cattle consider that they do not arrive as early at maturity as the short-horns; but for this State that defect is fully counterbalanced by the ease with which they are kept, and their ability to work. Colman says that a breeder, in whose experience and sound judgment he had the utmost reliance, contended that they could be raised to come to maturity as quick as the short-horns or the Herefords and that more money could be made out of them than from any other with the same expenditure. Mr. Colman also says that they are highly esteemed in Smithfield market in London, for the excellence of their meat, and because its size is more agreeable on most tables, than the huge joints of some other breeds. In weight, they are much excelled; but the opinion of their advocates is that more meat can be made from them with the same amount of feed." S. G. Cone, of Unadilla, writing to the Albany Cultivator in April, 1846, says of them "that with a given amount of feed, they will produce more value of meat than any other breed that we are conversant with." He says also "that they are a kind of cattle that mature at an early age, are often ready for the shambles at two years old, and are as heavy then as other breeds are at three, with the same keeping; and that they will subsist on coarser fodder, and look well, when in fact others would die."

Of their qualities for the dairy there appears, however, to be much discrepancy. That various families of the Devons where they have been bred for milk, are superior milkers, and that others are not extraordinary, is saying, no more than can be said of the improved Short-Horns. Some of the best and most celebrated grade milk cows in the United States have been crosses of this breed.—Colman says that the most productive cow in butter which he found in his travels was a North Devon, which for several weeks in succession, without extra feed, produced twenty-one pounds of butter per week. Mr. Bloomfield, the most eminent breeder of North Devons, stated to the same writer that his North Devon cows each averaged four pounds of butter per week the whole year round. Mr. Phinney, of Massachusetts, on whose farm was placed the Ayrshire and Devon cattle imported for the Massachusetts Society, states that the Devons are not such deep milkers as the Ayrshires, but for all the purposes for which cattle are kept by the New England farmer they are quite as valuable.

Stevens, in his edition of Youatt and Martin on cattle, names the Messrs. Quartley, Mr. Richard Merson, and Mr. James Barton, all of Devonshire, England, as the most distinguished breeders. Mr. George Turner, of the same county, and Mr. Bloomfield, of Norfolk, have more lately become very distinguished breeders of these cattle.

Among the breeders in this country who have paid attention to these cattle, and have made good importations are George Patterson, of Maryland, S. G. Norris, of Fordham, New York, R. H. Van Rensalaer, of Butternuts, N. Y., E. P. Beach, of Wyoming county, N. Y., Ambrose Stevens, of N. York, and Messrs. W. P. & C. S. Wainwright, of Dutchess co., N. Y.

As a profitable breed for the Michigan farmers, we believe the Devon cannot be excelled, and that where it has been crossed with native cattle, the improvement has been marked and in all cases the cross has been beneficial, every animal possessing superior qualities both for the dairy and for the shambles. The points adopted by the New York State Agricultural Society for this breed are as follows:

THE COW.

Purity of Blood, as traced back satisfactorily to importations of both dam and sire, from known English breeders, or as found in the lately established Herd-Book for North Devons.

The Head should be small, lean and bony, the forehead wide, flat, or from a fulness of the frontal bone over the eyes, somewhat dishing; the face straight; the muzzle fine; the nostrils open; the lips thin, and rather flat—2.

The Nose of a light delicate orange color—4.
of pure blood—.

The Eye should be bright, prominent, and clear, but mild and gentle in its expression, as indicative of that spirited, but tractable disposition so necessary to cattle that must bear the yoke; a beautiful

orange-colored ring should invariably surround the eye—4.

The Ear—thin; of a rich orange-color within, of medium size, with a quick and ready movement, expressive of attention—2.

The Horns—light, tapering, of a waxy color towards the extremity, and gaily, as well as symmetrically placed on the head; the occipital bone narrow, thus bringing the base of the horns nearer together—2.

The Neck of medium length, somewhat light in substance, very clean, and pretty well set up on the shoulder—2.

The Chest—deep and round, carrying its fullness well back of the elbows, thus affording, by the aid of a springing rib, abundant internal room for the action of the thoracic viscera, the heart and lungs, and that too without an *extreme* width forward, and between the points of the shoulders, which might interfere with the action of the animal—14.

The Brisket—it being assumed that it adds nothing to the internal capacity of the chest, must not overload the breast, but be sufficiently developed to guarantee a feeding property, attended with a full proportion of fatty secretion—4.

The Shoulder is, in this breed, a very beautiful and important point, and should in a *degree* approximate in form to that of the horse. It should take a more sloping position than is found in most other breeds, with its points less projecting, and angular, and the blade bone more curved, thus blending with and forming a fine wither, rising a little above the level line of the back—4.

The Crops full and even, forming a true line with the somewhat rising shoulder, and level back, without either drop or hollow—3.

Back, Loin and Hips, broad and wide, running on a level with the setting on of the tail—9.

The Rumps—lying broad apart, high, and well covered—5.

The Pelvis—wide—2.

The Twist—full and broad—3.

The Quarters long and thoroughly filled up between the hooks, or hip bones, and the rumps; with a good muscular development down the thigh to the hock—6.

The Flank—Moderately deep, full and mellow in proportion to condition—3.

The Legs not too short, and standing as square, and straight behind, as may be compatible with activity. The bone quite small below the hock and knee; the sinews large and clean, with the forearm well developed—5.

The Carcass round and straight; its posterior ribs almost circular, extending well back, and springing nearly horizontally from the vertebra, giving, in fact, much greater capacity than would at first appear—2.

The Tail, at its junction, level with the back, long, very slender in its cord, and finishing with a tassel of white hair—1.

The Color, in its *shades* and *degrees* is more or less governed by fashion; but in the Devon is always red. Formerly a rich blood red was the favorite color, and a test of purity; and now a somewhat lighter color is in vogue, approaching rather nearer to that of the *South* Devon, which is a larger, coarser, stronger animal. In all cases the color grows lighter round the muzzle, while a dark mahogany color, verging almost to a black, and growing yet darker about the head, always was a very questionable color for a *true North Devon*, more especially when accompanied by a dark nose—1.

The Hair should be short, thick, and fine; and if showing on its surface a fine curl, or ripple, it looks richer in color, and is supposed to indicate a hardier and more thrifty animal—1.

The Udder should be such as will afford the best promise of capacity and product—1.

Carriage.—The Devons having from their excellence in the yoke, another destiny besides that of the butcher's block, it is all important that the animal's carriage should indicate as much; but to obtain this, something of the heavy, inert, squarely moulded frame of the merely beefing animal must be relinquished for a lighter and more active frame—3.

Quality.—On this the thriftiness, the feeding properties, and the value of the animal depends;—and upon the touch of this quality rests, in a good measure, the grazier's and the butcher's judgment.—If the "touch" be good, some deficiency of form may be excused; but if it be hard and stiff, nothing can compensate for so unpromising a feature. In raising the skin from the body, between the thumb and finger, it should have a soft flexible and substantial feel, and when beneath the out-spread hand, it should move easily with it, and under it as though resting on a soft, elastic, cellular substance; which however, becomes firmer as the animal "ripens."—A thin papery skin is objectionable, more especially in a cold climate—15.

POINTS OF THE DEVON BULL.

As regards the male animal, it is only necessary to remark, that the points desirable in the female are generally so in the male, but must, of course, be attended by that masculine character which is inseparable from a strong, vigorous constitution. Even a certain degree of coarseness is admissable, but then it must be so exclusively of a masculine description as never to be discovered in the females of his get.

In contra-distinction to the cows, the head of the bull, may be shorter, the frontal-bone broader, and the occipital flat and stronger, that it may receive and sustain the horn—and this latter may be excused if a little heavy at the base, so its upward form, quality and color be right. Neither is the looseness of the skin, attached to, and depending from the under jaw, to be deemed other than a feature of the sex, *provided* it is not extended beyond the bone, but leaves the gullet and throat clean and free from dewlap.

The upper portion of the neck should be full and *muscular*, for it is an indication of strength, power and constitution. The spine should be strong, the bones of the loin, long and broad, and the whole muscular system wide and thoroughly developed over the entire frame.

Summer Fallowing got rid of—Treatment of Corn—A good top-dressing for Potatoes.

ARGENTINE, May, 1853.

MR. R. F. JOHNSTONE—*Dear Sir*:—In answer to your inquiry, whether any of your readers have ever tried potatoes on clover sod, I would say that I have planted potatoes on clover sod for the last seven years, and have not lost a crop yet. I plant the driest and lightest part of my lots with potatoes, and top-dress with a composition of plaster, ashes and salt; say one bushel plaster, half a bushel of salt, with two bushels good house-ashes per acre. I sow it broadcast, or sprinkle in the hill before planting; either way does well.

Now I have got my pen in hand, I will give you my management of a twenty-five acre lot of clover seed last year, with my reasons for departing from the old rule, which is, to plow and drag one year for a crop of wheat the next. The twenty-five acre clover lot that I had designed to summer-fallow, I broke up for corn and potatoes, and planted twenty-two acres of it with corn, and three with potatoes; rolled the ground well; marked it one way by dragging it with an ox-chain, and dropped the corn by stakes the other way. I planted four feet each way, in rows straight as a line, cultivated twice, then plowed each way; followed with the hoe, and killed all the weeds and grass, which was of course but a light job. In one week the corn so shaded the ground, that when it was fit to cut, it was as clean as summer-fallows generally are from weeds and grass. The tending of the corn I think was about the same labor as fitting for wheat the old way. I had a cultivator made purposely for putting in my wheat, in the following mode: I took a drag-tooth iron and welded a piece of spring-steel to one end, in the shape of a shovel-plow, three inches square; let the teeth project two or three inches further to land than an ordinary cultivator, and thus the corn-roots were prevented from choking it out. I then went through the field, cut four rows and left four, and laid them in gavels close to the standing corn. I then cultivated, then sowed, and cultivated again, and then dragged the ground well. After that I set up the gavels, and cut the remainder and set it on the sowed ground, and then put into wheat the remainder of the ground in the same way. The corn-stalks, in fodder for my stock, paid for harvesting the corn. I had eighteen hundred bushels of ears of corn, and five hundred bushels of potatoes, and my prospects are as good as usual at this time for a good crop of wheat. The ground is sowed to clover, and looks fine. There was but little more labor expended, and no more labor lost for pasturing the land, than to have had but one crop.

Yours, as ever, ABM. MIDDLESWORTH.

P. S. Mr. Editor, please take notice that the last clause in the eighteenth line of my article, on The Phenomenon in Fruit Culture, in the May number, should read *ross* or *outer bark* instead of *roots*.

A. M.

[The foregoing description of a method of treating a piece of ground for wheat, we consider a most valuable contribution. There are hardly any advocates at the present day, among good farmers, of losing the use of a piece of ground for a whole season by summer-fallowing. Mr. Middlesworth's remarks relative to his treatment of corn are perfectly correct. In growing corn, we perceive, as a general rule, too much neglect, first, in preparing the ground, and next, there is too little care taken to keep down the weeds and grass when the crop is young. If these pests are only kept under by a free use of the cultivator, till the corn has a fair chance to cover the ground, the crop will take care that no weeds will spring up afterwards.

We would further say, that the top-dressing mentioned by our correspondent may be applied with good effect to the potato crop, after they have started and grown to some size; and it has in many cases stimulated the growth of the potato plant so that the rot has not affected it.—ED.]

Treatment of Horses in the Spring.

MR. EDITOR:—As the Spring is the most critical portion of the year for horses, I have thought to pen a few lines on their management, more especially with reference to those which have been idle most of the winter, and which have been fed whole grain, more particularly whole corn, as is the practice of a great many farmers. In the first place, their feed should be exchanged for cut straw of some kind, or chaff, (which last is inferior on account of it being so frequently dusty,) wet with bran, and in every feed a little salt, to make it more palatable. Many persons of intelligence are, I think, much mistaken respecting the strength of bran as a feed. For my part, I think it good alone, but perhaps better to be mixed with chopped hay or straw; rye is preferable; corn and oats ground together are next in quality; however, I incorporate them with an equal quantity of bran.

The next thing of importance is to cleanse their blood, which is best done by boiling the twigs of Spicewood with Sassafras barks, and with this wet their food several times; or pour warm water on ashes, and in the ley soak shelled corn; give it to them a few times. It would also be well to look for bots a little at this season, and provide a remedy, or what is better, a preventative.

Great care should be taken, in order to prevent horses from galling, which they are apt to do when first worked in the spring. To prevent this, see that the hair of the mane does not get under the collar, which is bad for them I am much in favor of washing horses' shoulders with cold water, and

in some cases, a few days before commencing the spring work. It should be done noon and night, after they have commenced work. From what I have seen, the idea has struck me that they suffer more from ill-ventilation in stables, and in consequence of having the harness left on at noon, than is generally conceded.

Another cause of their galling is the extremely bad manner the collar fits that is sometimes used. A collar should not be too large nor too small, and it should be made of hogskin; it ought also to be filled with hair of some kind—deer's hair I consider the best, hog's next, and I have not a bad opinion of hair of any kind. Collars should be cleaned frequently and kept as soft as possible. Not unfrequently the hair in them gets hard, when they ought to be well pounded with a stick, which will soften them. VIDI.

THREE RIVERS, May 2, 1853.

Marsh Hay.

MR. EDITOR:—I perceived in the *Farmer* a short time ago some remarks of D. D. Tooker in regard to the relative value of clover and marsh hay. So far as my experience has taught me, I can affirm, that if the marsh grass is cut in the proper season, and well secured, that it will go farther than the same amount of clover hay, and keep horned cattle in as good condition. I am well aware that many hold a different opinion; but if they will only take the same pains to cut the marsh grass in proper season, cure it as well, and secure it from the effects of the weather in as good condition as they do their clover hay, I am of opinion they will think with me.

I know of no grass that repays the farmer so well as that which grows wild on our marshes; and yet it is frequently left for days together to bleach in the sun and rain after it is cut.

The wheat crop looks well in this section of the country, but I think there is quite a falling off in the amount sowed last year when compared with the quantity sowed the previous year.

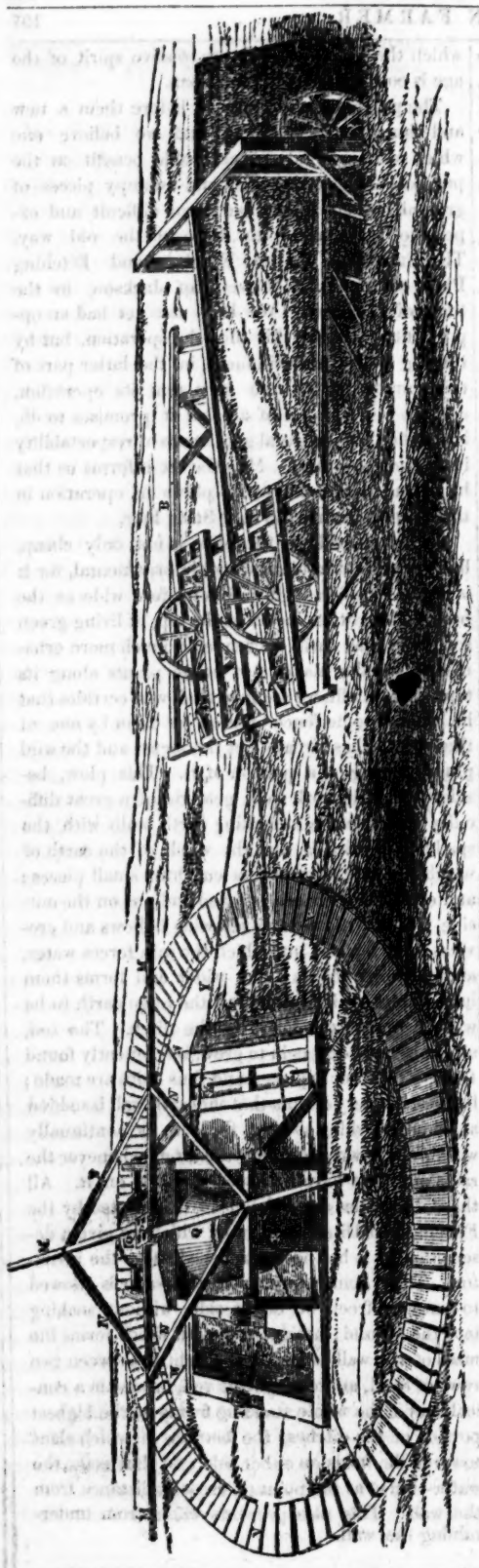
BRIGHTON, May 8, 1853. H. A. ARMSTRONG.

Gavett's Fencing and Ditching Plow.

The age of invention appears to have but just begun, especially mechanical invention as applied to Agriculture. Within the past ten years there have been more machines and engines invented and applied to do away with the most laborious work, than there had been for ten centuries previous. What with sub-soil plows, mole plows, draining plows, sowing machines, drill-barrows, thrashing machines, mowing machines, harvesting machines, that have been put in successful operation, and in the manufacture of which thousands of hands are employed, one is almost kept busy examining their respective merits, and reporting the various improvements, which the go-ahead and progressive spirit of the age is constantly making to them.

The public have now thrust before them a new and important invention, and we believe one which will be found of inestimable benefit on the prairie lands, and on wet and swampy pieces of ground, which it may be found difficult and expensive to drain or to fence in the old way. This invention is the Fencing and Ditching Plow of H. L. F. Gavett, of Jackson, in the State of Michigan. We have not yet had an opportunity of seeing this plow in operation, but by turning to the advertisement in the latter part of this number, it will be seen that its operation, and the performance of all that it promises to do, is certified to by several gentlemen of respectability in the neighborhood. Mr. Gavett informs us that he means to have one of his plows in operation in this vicinity during the next State Fair.

The fence made by the plow is not only cheap, but perfectly durable and highly ornamental, for it is a wall four feet high and four feet wide at the base, and eighteen inches at the top, of living green sod, which can easily be rendered much more ornamental by the planting of hedge plants along its top. Mr. Maffit, we are informed, who certifies that he has had some fence built on his farm by one of these plows, has already got the locust and the wild plum growing on a portion of it. This plow, besides doing the work well, gets rid of a great difficulty which occurs in making earth walls with the spade, and which is, that the whole of the earth of which the wall is formed, is cut into small pieces; and even when the sod is saved and put on the outside, it is in little squares allowing hollows and crevices to be formed, into which the rain forces water, and of course makes them wider and forms them into gutters, which soon allow the loose earth to be washed out of the heart of the ditch. The sod, also, when it does begin to grow, is frequently found to have died out in places, and thus holes are made; besides, it is very seldom that the earth wall is sodded at all on the side, so that the rain is continually washing it down and filling the ditch, whenever the rains and frost have a chance to work on it. All these difficulties are claimed to be obviated by the Fencing and Ditching Plow of which we give a description, as it has been furnished us by the inventor. There being two ditches, the water is allowed to run very freely on either side, without soaking into the ground; besides, the earth which forms the mass of the wall, is put in the centre, between two rows of solid, unbroken, living sod, formed in a conical shape, the whole standing firmly on the highest portion of the ditches, the bottoms of which slant towards the fields on either side, and thus make the water-course at the point of greatest distance from the wall. This also prevents water from undermining the wall.



GAVETT'S DITCHING AND FENCING PLOW IN OPERATION.—(Fig. 1.)

DESCRIPTION OF THE MACHINE.

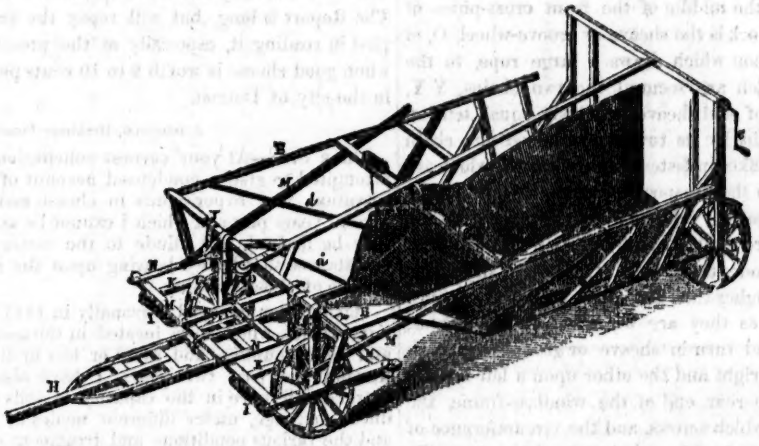
The annexed engravings are views of a Ditching and Fencing Plow invented by H. L. F. Gavett, of Jackson, in this State, patented the 9th day of September, 1851, and now improved by the said Gavett as it is represented in the cuts. The nature of this invention consists in arranging a series of cutters, mould-boards and guides so that two wedge-shaped slices of sod shall be cut, with the thinner edges together, and gradually turned upon their broad edges, with their bottoms set close together, and put in an upright position upon the highest or middle part of the ditch, from which part their thinner edges were cut; thus making at one operation two ditches with bottoms slanting from each other, and a solid, conical earth wall between them, with the sod on both sides thereof extending from its top to the bottom of the ditch.

Fig. 1 is a perspective view of the plow in operation, together with the windlass, to be worked by oxen or horses, and its artificial roadway for them to travel upon in soft land. Fig. 2 is a perspective view of the plow raised upon its wheels for carriage. Fig. 3 is a perspective view of the plow in a condition to be raised and run out of the ground; and Fig. 4 is a perspective view of the windlass raised upon its drums, to be used as wheels for its carriage. The same letters refer to like parts in all the cuts.

The bottom of the plow is made of an angular form—with knives upon the front end—so as to cut deeper at the sides than at the middle of the plow: said knives cut the wide slice of sod loose from, and form the angular bottom of the ditch, the side knives, *d d*, cut the thick edges of the wide slice of sod loose from the sides of the ditch, and the centre vertical cutting-knife *a'* divides it at its centre or thinnest point, thus making two wedge-shaped slices. The wide or double mould-board, A, is formed of two mould-boards, each the same width as one-half of the bottom of the plow, with their inner edges united their whole length, at the middle of the plow, and gradually rising from the foot or lower end of the vertical cutting-knife, *a'*, in a line directly in the rear of said knife, and perpendicular to the angle made at the middle of the bottom of the plow; while their outer and lower edges, starting from the lower ends of the side knives, *d d*, mutually approach each other as fast as the rise of the said inner and upper edges will permit, until they meet, thus twisting each half of said wide mould-board, A, in opposite directions, from the bottom knives at the front end of the plow, to a perpendicular at its rear end, where *their* rear ends are united in a vertical line. The side or narrow mould-boards flare

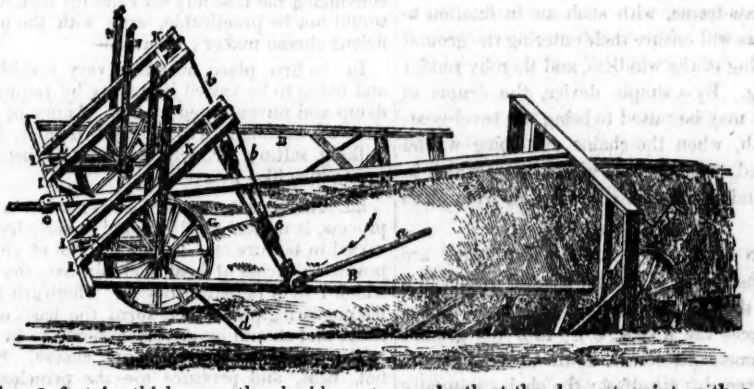
from, and form a somewhat obtuse angle with, the outer and lower edges of the wide mould-board, A, their whole length. They also form the same angle with their respective halves of the wide mould-board, A, as each half of the bottom (where they are united) forms with a vertical line, or a line perpendicular to the plow: at their front ends they start on a line parallel with the side knives, *d d*, respectively, and twist the same as their respective halves of the wide mould-board, A, until at their rear ends they are in a line parallel with the bottom knives respectively, or parallel with the bottom of their respective ditches when the plow is in the ground. Secured to the middle of the side or narrow mould-boards, extending along their whole length, and having the same twist respectively, are the guides A' A', standing out nearly perpendicular to them.

Fig. 2.



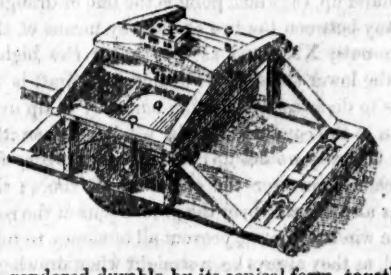
OPERATION.—The knives cut a wide ditch, about 2 feet deep at its outer portions, and 9 inches deep at its centre, and at the same time form the dirt or earth cut therefrom into two wedge-shaped slices, each about 4½ feet wide, the edges inside or together being 9 inches in thickness, and the edges at the

FIG 3.



outside being 2 feet in thickness: the double or wide mould-board gradually raises the thinner edges of the two slices, and turning their bottoms from the bottom of the ditch, folds them together, while the side or narrow mould-boards turn the thicker edges of said two slices from the sides of the ditch to the centre and higher portion of its bottom; and the guides, A' A', let themselves into these said thickest edges, guide them together, and hold the two slices of sod upon the mould-boards, while they are being turned to an upright position at the rear of the plow, thus dividing the wide ditch into two ditches, each about two feet wide, with the same depth at the deepest point, with a solid dirt

Fig. 4.



wall, rendered durable by its conical form, together

with the living, unharmed sod upon its entire surface, and the slanting bottom of the ditches throwing the current of water (when there is one) out from the wall to prevent it from washing.

The plow is supported in a suitable frame-work, to which are secured the wheels G G and D D, upon which the plow may be drawn in the ground, or elevated above its surface; and by means of which, together with the lever *a* and its accompaniments, the cutting depth of the plow may be adjusted. Secured to the middle of the front cross-piece of the frame-work is the sheave or groove-wheel, O, of the plow, upon which draws a large rope, to the ends of which are secured the two chains, Y Y, (the object of said sheave is to keep equal tension in each chain, by its turning whenever one chain chances to take up faster than the other,) which are wound upon their respective drums, Q Q, by means of bevel gearing, which, by means of the levers, M M M M, are rotated in the direction that will wind the chains under the drums Q Q, whereby the chains never rise higher than the lower sides of the drums. The chains, as they are wound upon the drums, pass over and turn in sheave or groove-nuts, X X, one upon a right and the other upon a left-handed screw at the rear end of the windlass-frame, the threads of which screws, and the circumference of the nuts bear such a relation to the size of the chains and size of the drums, as to ensure the close packing of the chains, and at the same time to prevent them from surging. U U U are hooks secured to the windlass-frame, with such an inclination to the horizon as will ensure their entering the ground by the working of the windlass, and thereby render it self-setting. By a simple device, the drums of the windlass may be raised to bring the bevel-gearing into mesh, when the chains are being wound up or lowered, to be used as wheels upon which to move the windlass, to take a new set, or from place to place.

Operation of the Windlass.—The teams are hitched to the levers, M M, and passing round in a circle, wind the chains upon the drums, Q Q, and the draft forces the hooks, U U, into the ground until the frame-work comes down to the surface, and then it remains steadfast: the chains mutually approach the centre of the windlass as they are being wound up, (at which point is the line of draught, half way between the two chains,) by means of the sheave-nuts, X X; and as they never rise higher than the lower sides of the drums, the draft is so low as to do away with all the tendency to tip over known in the common upright windlass when the chain is nearly wound up; and it makes it easy for the team to get over the chains at all times; the chains also drawing over the groove-nuts at the rear of the windlass-frame, prevent all tendency to turn round, as they always keep straight when drawing.

Cheese-Making.

At the request of some subscribers to the *Farmer*, residing in Genesee County, we publish the following Report on the Making of Cheese, which was made to the New York State Agricultural Society in 1847, by A. L. Fish of Herkimer County. The writer who forwards the request refers to it as a mode of *making cheese without pressing*. He is mistaken about that: the press is needed; but he will see the description of the operation for himself. The Report is long, but will repay the time occupied in reading it, especially at the present time, when good cheese is worth 9 to 10 cents per pound in the city of Detroit.

Litchfield, Herkimer County, 1847.

Dear Sir:—At your earnest solicitation, I have attempted to give a condensed account of my observation and experiments in cheese-making for several years past; in which I cannot be as brief as may be desired, and allude to the variety of circumstances that have a bearing upon the intricate science of cheese-making.

Having been engaged personally in 1845 in some sixty dairies, which were located in thirteen towns and four counties, and more or less in the same manner the past two years, I have observed a marked difference in the capacity of soils for producing herbage, under different modes of culture, and the various conditions and treatment of cows, affecting their capacity for milk, both as regards quality and quantity. The inconvenient and improper fixtures, in many instances, for making and curing cheese, which are to be found, all unite in convincing me that any set rules for making cheese would not be practicable, even with the most proficient cheese maker; because—

In the first place milk is a very sensitive fluid, and liable to be varied in quality by impure water, damp and unventilated stables, change of diet, excess of feeding, excitement of temper, irregular milking, salting, &c., which destroy its susceptibility to produce like practice.

2d. Cheese, when pressed and exposed in a curing process, is no less sensitive, and equally liable to be varied in texture and flavor, by size of cheese, exposure to excess of heat, bad air, &c., the effect of which I shall hereafter notice. There are, however, leading principles which form the basis of operations, and should be closely adhered to in all cases in the process of manufacturing cheese. Salt, rennet, heat, and pressure are the principal agents used in converting milk into cheese, the flavor and texture of which is determined by their proportionate use. The proportion is varied by different dairymen, according to their notions of propriety, as best adapted to their fixtures, experience, &c. Hence arise the great inequalities in dairies in the same neighborhood; and even in the same dairy-rooms may be found as many different qualities of cheese as there are of fruit in an apple orchard. Some of these are matured at an early period, while others mature later, and are unsuited to the same market.

Much of the cheese being contracted for before it is made, (in the early part of the season,) both buyer and maker are liable to be disappointed in the cheese being suited for the market for which it

is designed, destroying the confidence of purchasers, and injurious to the best interests of dairymen. It is, therefore, necessary that makers should have sufficient knowledge of the science to determine the result of their practice, which cannot be learned from verbal instruction. It is by practical experience and close observation only, that the maker can learn to adapt his practice to the frequent and extreme changes to which our climate is subject, varrying the quality of the milk, and materially affecting cheese in process of curing.

I will suggest a plan (in the following table) of keeping a dairy-book, or memorandum of each day's practice, which I have adopted in my dairy for several years past, and which has greatly enabled me to investigate the science of cheese-making, being a table illustrating the experiments made by me the past season:

DAIRY DIARY.

Date.	No. of Cows in Milk.	No. of Gallons of Milk.	Heat of Milk at Setting.	Time of Curding, in Minutes.	Time of Breaking, in Minutes.	Time of heating up.	Scalding Heat.	Time scalded, in Minutes.	No. of Teacups of Salt.	Quality of the Curd.	Kind of Weather.	Press'd w'ght green marked on the bandage before greasing †	No. of Cows bulling or in heat.	Cheese huffed or cracked.	Days old when huffing or cracking commenced.
April 21	42	102	90°	80	60	50	100°	40	6½	Sweet	Cool; stormy	109	....	Soured	10
26	42	105	90	20	30	40	100	25	6½	do.	Fair	104	....	Huffed	3
May 6	42	106	90	50	40	40	100	60	6	do.	do.	104	....	Baked; huffed	20
8*	42	103	90	50	40	40	100	60	12	Sour	do.	108	....	Sour and hard	30
21	43	142	90	60	75	50	101	45	12	Sweet	do.	153			
June 6	44	158	88	60	75	45	102	40	14	do.	Rainy	185		Huffed	20
16	46	165	86	55	60	35	102	45	16	do.	Fair	196			
18	46	155	86	45	50	30	102	50	14	do.	do.	174			
July 10	50	160	86	40	55	30	103	40	14	do.	do.	175			
20	50	140	86	40	50	40	104	50	13	do.	do.	154			
Aug. 10	50	121	86	50	30	30	100	30	10	Sour	Thunder; wet	123	....	Soft	
17	50	118	90	50	30	30	1 0	40	12	Sweet	Fair	128	....	Hard	
Sept. 10	50	120	88	40	30	50	104	45	10	do.	do.	128			
20	50	116	90	40	50	40	104	40	10	do.	do.	125			

The evening's and morning's milk is commonly used to make one day's cheese. The evening's milk is strained into a tub or pans, and cooled to prevent souring. This is done by running water through a vessel set in the milk, or setting pails filled with cold water into the tub, and stirring till cool: but little cream will rise over night.

The cream is taken from the evening's milk, and kept till the evening's and morning's milk are put together, and warmed to receive the rennet. This is often done by heating a part of the evening's milk to a temperature that will warm the whole mass. Both are objectionable; because the natural affinity which is necessary to preserve between the constituent parts a perfect coherence is destroyed, by a portion of the milk being overheated. It is better to warm the whole mass in a manner that will produce an equilibrium of heat, which is best done by placing the vessel containing the milk within a larger vessel, with two inches under the bottom, and one inch of space at the sides, into which space water may be put to cool the milk, and into which steam may be let to warm the milk and scald the curd. The more water surrounding the milk, the more uniform will be the heat. The cream, if added, (which is generally done,) is best incorporated with the milk, by putting it with twice its quantity of new warm milk from the cow, and add warm water to raise its temperature to ninety-eight degrees. Stir it till perfectly limpid, add cream to milk, and then put in rennet, that the same stirring may mix both at once with the mass. If milk is curdled below eighty-four degrees, the cream is more liable to work off with the whey. An extreme of heat will have a like effect.

Curdling heat is varied with temperature of the air, or the liability of the milk to cool after adding rennet. (See table, April and June.) A fine cloth spread over the tub while the milk is curdling will prevent the surface from being cooled by circulation of air. No jarring of the milk, by walking on a springy floor or otherwise, should be allowed while milk is curdling, as it prevents a perfect coherence.

Rennet.—Various opinions exist as to the best mode of saving rennet, and that is generally adopted which is supposed will curdle the most milk. I have no objection to any mode that will preserve its strength and flavor, so that it may be smelt and tasted with good relish when put into the milk. Any composition not thus kept I deem unfit for use, as the coagulator is an essential agent in cheeseing the curd, and sure to impart its own flavor. The rennet should never be taken from the calf, till the excrement shows the calf to be in perfect health. It should be emptied of its contents, salted and dried, without scraping or rinsing, and kept dry for one year, when it will be fit for use. It should not be allowed to gather dampness, or its strength will evaporate. To prepare it for use, into ten gallons of water (blood warm) put ten rennets; churn or rub them often for twenty-four hours; then rub and press them to get the strength; stretch, salt and

* In this case it was found impossible to harden the milk with rennet or heat, owing, undoubtedly, to excess of fermentation from feeding barley meal, and sudden change from cool to hot weather. A change from oatmeal to shorts is an effectual remedy.

REMARKS.—Average weight of cheese per gallon of milk, in April, 1¼ lb.; average per day per cow, 2⅔ lbs.; shrinkage in 60 days, 10 per cent.; cows kept to hay, with whey and two quarts of provender, soured in slop, for each cow. Cured quick and tainted. Leaked oil at 90 days old. Average weight of cheese per gallon of milk, in May, 1 1-16 lb.; average per day per cow, with the feed as in April, 3 1-40 lbs.; till May 15, turned to grass; shrinkage in 60 days, 9 per cent. Average weight per gallon, in June, 1·1 30 lb.; average per day per cow, 3¾ lbs.; fed no grain in June; turned into fresh feed June 16. Commenced feeding sowed corn the 15th. Average weight, in August, per gallon, 1·1-17 lb.; average per cow, two and a half pounds per day; fed no grain. Average weight per gallon, in September, 1·1-14 lb.; average per cow, two and a half pounds. October 10—Commenced feeding apples, raw; on feeding plentifully milk was rank flavored, with increase of quantity, the curd tough and corky, and cheese inclined to huff: taking apples from them and feeding shorts was a quick remedy. On turning to apples again, the same effects were perceived; and I have noticed the same results for several years on feeding plenty of raw apples or excess of other food, producing too rapid fermentation in the stomach and stinking breath from the animal; hence the impropriety of frequent change from scanty to flush of feed, it being sure to reduce the quantity of milk, as in June 16, in the table above.

† Let the date of making each cheese be marked on the bandage with common ink before it is greased, and a ready reference can be had from that to the schedule, at all times, and the result of any variation distinctly marked. A slate and pencil, hanging near the cheese tub, to mark every day's practice, it will not cost much time, and is easily transferred.

dry them as before. They will gain strength for a second use, and may be used when the weather will admit of soaking them to get the full strength. Make the liquor as salt as can be made, strain and settle it, separate it from sediment, (if any,) and it is fit for use. Six lemons, two ounces of cloves, two ounces of cinnamon, and two ounces of common sage are sometimes added to the liquor to preserve its flavor and quicken its action. If kept cool in a stone jar, it will keep sweet any length of time desired, and a uniform strength can be secured while it lasts. Stir it before dipping off to set milk, take of it enough to curdle milk in 40 minutes. Squeeze or rub it through a rag anatto enough to make the curd a cream color, and stir it with the rennet. When milk is curdled so as to appear like a solid, it is divided into small particles, to aid the separation of the whey from the curd. This is often too speedily done, to facilitate the work, but at a sacrifice of quality and quantity.

The three indispensable agents, heat, rennet and pressure, rightly applied, must keep pace with each other in effect. The two former operating to subdivide, the latter to aid cohesion, by bringing the parts of a sameness closer in contact. This should be skilfully and studiously applied in a mild way, according to the capacity of the curd to receive it. The less friction in working the curd, the less waste. If heat is raised too fast, or commenced while the curd is too young, the effect of the rennet will be checked, and decomposition will not be complete, and will result in a leaky cheese.

This often happens when steamers are used in small dairies. Heat may be raised in scalding to keep pace with rennet: if the rennet is quick, heat may be raised quick; if slow, heat must be raised slow, and held longer. (See table, April 24 and 26.) Scalding heat may be carried fram 96 to 104 degrees, according to the size of the cheese, and temperature to which the cheese is exposed. During the process of scalding, the whey and curd should be kept in motion to prevent the curd from settling and sticking together, as separating it is attended with great labor and waste from friction.

When the curd is cooked so that it feels elastic, and will squeak when chewed with the front teeth, it is separated from the whey to receive salt. This is done by dipping it into a strainer over a basket or sink, or drained off and salted in the tub. Either may be done without adhering in lumps, by stirring it in a small potrion of whey, till cooled to 94 degrees. This is the most critical part of the process, where cheese-makers are most likely to err, as the portion of salt retained in the cheese after pressing will be in proportion to the capacity of curd to receive it when added. At a particular period and temper of curd when draining off whey, it will absorb salt freely, and after being thoroughly mixed and packed up for a few minutes while warm, it will be evenly shrunk and cleansed by salt and whey, and will press out freely; but if the curd is *not well cooked*, or cooled too fast in draining off whey, it will acquire a degree of stubbornness, prevent the absorption of salt to shrink and cleanse, and *no amount of pressure* will be sufficient to drive out the fluid.

If curd is not worked even, the larger lumps will not be cooked enough, or the lesser too much, (like large loaves of bread and small biscuit baked together in one oven;) hence, the cheese is left impregnated with the elements of fermentation, which increase on being exposed to heat, till the cheese is sufficiently swollen, or huffed, for each constituent to occupy a separate space in the same shell, or rind. The fluids first attract together by affinity, forming small cavities in which they remain *unaffected by salt*, become fetid, and generate an unpleasant odor, which is a fair proof of the quality of rennet used. Curd should be salted warm; it is then most absorbent, and thoroughly cooled before putting it to press, to suppress the combined action of *heat* and *rennet*. The quantity of salt required varies with the condition of the curd, size of cheese, amount of heat to which the cheese is exposed in curing, and market for which it is designed.

A well-worked cheese, from fifty to one hundred pounds, requires one pound of refined salt to forty pounds of curd, to remain in the cheese after it is pressed and exposed to a temperature of from seventy to eighty degrees. This may be varied from two to four pounds to the hundred, according to the texture of cheese required—small cheese requiring less, and large cheese more.

A degree of moisture is necessary in cheese for a malleable texture, but this should not be from *animal fluid contained in the curd*. A high-salted cheese immediately exposed to high temperature, becomes sour, hard, dry, and crumbling: the same, exposed to a cool, damp atmosphere, retains sufficient moisture to be soft, yet solid. A cheese light-salted, in a high temperature, will cure quick, become porous, huffy, and stale. *Curd from hay milk* requires much less salt than that from grass or grain feed, as it is poorer, and will retain salt like lean meats. The richer the milk, the more salt is required to control the animal properties, and the *less absorbent the curd*; the pores being filled with the finer watery particles. (Vide table, April and August.)

More salt is required in hot weather, also, to overrule the *continued action of rennet* and heat, *neither of which will be effective alone*. When curd is ready to press, it is important to *dispossess those decomposing agents*. The gastric juice, or coagulator, is a *fluid*, and works off with the animal fluids in whey; and the only way to get rid of it is to work the curd down *fine and solid* and *work the whey all out*. Then cool the curd thoroughly before pressing, and the cheese will be solid and keep its place. But if the whey is not all out, the decomposer is yet on hand, continues its action (aided by heat) till *an equilibrium of chemical action is destroyed in the cheese*, and the fluid properties leak out in fetid whey and oil, leaving it a rank and worthless article. In short, the proper method of using salt must be arrived at by a close observation as to its *chemical combination* with the *constituent properties* at different ages of the cheese with different sizes, heat, dampness, &c. This, although an essential point, has not been sufficiently determined by chemical analysis to be reliable.

Pressing.—When curd is properly tempered for pressing, a cotton or linen cloth is spread over the hoop, the curd is put in, and pressed with from three to twelve tons weight, turned twice in eight-and-forty hours, into clean dry cloth. The press should be faithful, and follow down as the curd yields, when young, to press out whey before a rind is formed to prevent its escape. There is no danger of too much pressure *after the first ten minutes*. The press, hoops, cloths, &c., should be cleaned with ley *often*, to keep the rind from cracking. The cloth is taken from the cheese when it is taken from the hoop. The cheese is set on a table for a few hours, till dry enough to absorb oil, and then paint-

ed with anatto mixed in strong ley, (from common ashes,) kept in a jar for ready use. This toughens the rind so that it will not require much grease after the first coat, to make a smooth rind, if rubbed often with the hand moistened with oil.

The paint will fade to a rich butter color, which is as high a color as is desirable. A firm rind may be formed upon cheese when young, by a careful exposure to drying air, frequent rubbing with the hand, and no more oil than will readily incorporate with the rind. If more grease is used than will be taken up, it will sooner or later flake off, leaving the cheese scabby, without rind, exposed to cracks, flies, mould, &c. Oil for greasing cheese is obtained from cream skimmed from whey after standing twenty-four hours; it is churned till separation takes place like butter, then melted over a slow fire till it is turned to oil. A preparation of beeswax, from ⅛ to ¼, mixed with oil, will make a rind impervious to flies. It is most desirable that cheese designed for foreign markets should be in a proportion half as thick as they are wide, and not to exceed 100 pounds in weight. The size of the hoop may be calculated from the number of gallons of milk: each gallon will make one pound of cheese.

A cheese 21	inches	wide	will weigh	14½	lbs. to each in.	in depth.
" 20	"	"		12	lbs. "	"
" 19	"	"		10½	lbs. "	"
" 18	"	"		9	lbs. "	"
" 17	"	"		8	lbs. "	"
" 16	"	"		7	lbs. "	"
" 15	"	"		6	lbs. "	"
" 14	"	"		5	lbs. "	"

Cheese of the above proportions are banded with cotton cloth to keep them in shape. The band should not cover more than an inch or inch and a half of the flat surface. Heavy cheese must be banded with cloth that will not stretch, or its gravity will make them ill-shapen.

In April last, I divided curd into two equal parts, after it was salted and ready to press, and pressed in equal and varied shapes to ascertain the result of varied heat, salt, &c. April 24th, (see schedule of April,) No. 1 was kept in a room of from 90 to 100 degrees heat; did not huff, but not having rennet enough to keep pace with the heat, soured, was hard, dry, and smart; shrunk twelve per cent. in sixty days. No. 2, kept in temperature not exceeding seventy-five degrees, did not huff, cured slow, was soft and of mild flavor, shrunk nine per cent. in ninety days.

April 26th, doubled rennet; put cheese No. 3 by side of cheese No. 1; No. 3 huffed in three days, in twenty days run oil, tainted and spoiled; No. 4 put with No. 2; huffed, cured quick, and was light, porous, and sharp. Doubling the amount of salt would control rennet, and keep cheese from huffing; but did not prevent them from souring, becoming hard and unmerchantable. The time of curing was in proportion to the amount of heat and rennet used. Some of the high-salted cheese in a hot room were bitter; but none in the cool room had that flavor, were longer curing, shrunk less, and were better cheese. The same course was taken in August, by dividing several days' curd each day into three equal parts, pressed alike, and exposed to different temperatures in curing. The result was in favor of a medium rate of salt and heat, high salting and heat making hard, smart cheese; low salting and heat, soft, mild, and tasteless; low salting and high heat, porous, soft, and sharp.

In 1845, the experiments alluded to, with sixty dairies, being got up expressly for shipment, a selection was made from the largest and most experienced dairymen in thirteen towns. A vigorous effort was made to reduce the whole practice to one general rule, consisting of strict cleanliness in every department, an equilibrium of heat in milk to set, not exceeding ninety degrees, with pure rennet to curdle milk in forty minutes; curd thoroughly worked by hand till as fine, when scalded, as wheat or corn; curd scalded in whey with heat not exceeding one hundred degrees, and that heat held until the curd appeared shrunk, and would squeak when pressed between the front teeth: the whey to be drained off, and the curd salted while warm, with 2½ pounds of refined salt to 100 pounds of cheese, cooled and pressed forty-eight hours. Cheese half as high as wide.

These leading points, strictly adhered to, were found adequate to produce the article required, where curing-rooms were constructed so as to preserve a uniform moderate temperature. The cheese, not affected by extreme changes of climate, fermented slowly and uniform, rind firm and smooth, with little grease; texture firm and solid, yet malleable like butter; the flavor mild and pleasant. The weather being cool till June, a great uniformity was manifest in shape and texture. A sudden change of weather to 88 degrees heat, lasting several days, produced a contrast in different dairies, equal to the extreme in temperature, which was found in many dairy-rooms to exceed the common atmosphere from 8 to 10 degrees. With little or no ventilation in these, cheese were much swollen, and could be kept in shape only by using less rennet and more salt. The huffed cheese remaining in same rooms became tainted, or generated a sharp, unpleasant flavor; those removed to a temperature suited to their constitution, cured quick, and were well adapted to early home markets. Those salted high enough to stand the excess of heat, were hard, dry, crumbly and smart. A dry room was found best for a wet cheese, and a damp room best for dry cheese; but in no case was a high temperature (exceeding 75 deg.) found necessary.

These, and like experiments, too numerous to detail, confirm my conviction that much of the bad flavor complained of in the American cheese, may be prevented with proper attention to curing. In addition to the extreme changes of weather in our climate, which are more than sufficient to destroy the constitution of a well-manufactured cheese, the practice too generally prevails, of placing cheese in some loft or upper room, least needed for other uses, and often next to a roof, where heat concentrates, and cheese becomes literally baked, as in Nos. 1 and 3. I deem such rooms best as are calculated to preserve an equilibrium of low temperature. A tight, spacious, studded, and plastered lower room, well ventilated with northern exposure, where heat may be increased, and air dried by fire and ventilation, or cooled and dampened if required, by air from an underground or adjoining room, where ice may be kept, is best adapted to this climate.

A. L. Fish.

B. P. Johnson, *Secretary.*

On Raising Potatoes.

Saline, May 8, 1853.

Mr. Editor:—In the last number of the *Michigan Farmer* you say, "We should like to know whether any of our readers have ever tried potatoes on a clover sod, or on a piece of sward that had

been planted with corn first, after breaking up, and then planted with potatoes the next year?" In answer to this inquiry, I say yes, but I consider the turf much the best, as it will stand the drouth longer than stubble-land, though I frequently plant after wheat which had been sowed on the sod. I have tried potatoes on land that has had almost all kinds of crops raised on it the year before, and seldom got less than two hundred bushels to the acre, and have sometimes raised three hundred. I have never been troubled with the potato rot, as I have raised them on a light soil since the disease made its appearance. My mode of raising potatoes is as follows: The land is plowed eight or ten inches deep just before planting, and thoroughly harrowed; I then furrowed it two or three inches deep, in rows three and a half feet apart; the seed is dropped across the furrows, one potato in a hill, three feet apart, and covered with two strokes of the hoe, one partly on each side of the potato, so that the seed will be covered, and the hill filled about level with the land around it. After the potatoes are large enough to hoe—say from ten to twelve inches high, or before they begin to top—I plow them out one furrow in a row across the furrows that were made at the time of planting, and two furrows the other way; and if the land is free from weeds, they will not need much hoeing. I have frequently plowed and hoed two acres in a day. I raise the flesh-colored potatoes, which are considered by the farmers in this vicinity to be more hardy, and less liable to be affected by the rot. I have tried a great many experiments in the cultivation of this excellent root; and were they not at present considered by the farmers generally so uncertain a crop, I would recommend them to be raised to be fed to all kinds of stock, especially sheep.

ISAAC ELLIOTT.

Economy of the Drill System.

FRIEND JOHNSTONE:—I acknowledge that I was not explicit enough in my remarks on the drill system, but will now endeavor to give a few remarks in answer to your suggestions. In the first place, with one team I can drill in twelve acres in one day, which we will say is worth $2; in regard to the saving of the seed, it wants 1½ bushels per acre, at $1 per bushel, which will make $15, making the whole expense of sowing twelve acres about $17. Now to sow broadcast the same number of acres it wants 1½ bushels per acre, which is - $18 00
The use of team two days - - - 4 00

$22 00

The average quantity of grain raised by the drill system, at the least calculation, is about five bushels per acre more than from an acre sown broadcast. I do not mean to be extravagant. You will readily perceive that there is a saving of $5 for time and seed on twelve acres, to which you may add 60 bushels more of wheat at harvest time. The piece of timber-land that I alluded to in my former letter, the half of which was sowed broadcast, perhaps did not feel the effects of the frost this spring, as it was not as hard this season as it is generally; but I think the drill is a great preventative of the bad effects produced by frost. Yours, in haste,

May 15, 1853. WOLVERINE.

On Breeding Sheep.

MESSRS. EDITORS:—One J. Starkweather, over at Ypsilanti, in writing for the "Wool Grower," ruled out the right of crossing the improved Merino Ram of France upon our American ewes and other sheep of the smaller varieties. Mr. S. says, "It would be doing violence to all natural laws to couple a buck weighing two hundred and a quarter pounds, of a distinct variety, to one of our Spanish Merino ewes, about one-third its weight; as the result, we might expect a miserable counterfeit of both, having a big head, long back, long legs, flat ribs, short and steep in the rump, and pinched in the chest, possessing as many qualities of wool as could be obtained from the sire and dam, the coarser grade predominating."

Mr. Starkweather, very possibly, makes his observations on big heads, long legs, &c., from his long experience and success in the raising of Jacks. Other writers conclude that the coupling of a larger race of Jacks to a smaller and different variety of Jills, will according to "all natural laws," produce these very results above named by him.

But his principle does not operate where the original is of the same blood on both sides. The size of the one made by good breeding, the other reduced by ill care. The offspring of all blood stocks including horses, cattle and sheep, are born smaller than grade or mixed stock. As also the stock from the cross of a pure blood male upon a female grade, the offspring of the pure blood predominates, overruling the size in the foetus, and is usually less, than from parents both of mixed blood. Experience is said to be the best school-master.—Those who have used * pure Spanish Merino Rams, of the French improvement, upon the American Merino Ewes of Spanish origin, with their grades, will sustain us in the doctrine, that the lambs do not drop any larger in size upon the average than if the rams coupled were of the common Merino or mixed blood.

Theories upon paper, to be sound, must hold good in practice. We dare presume that "miserable counterfeits" on his favorable stock of big heads and long ears are often produced, when he

* We admit that impure Merinoes have been imported.

breeds, contrary to nature's laws. But the coupling of the pure blood Spanish Merino, the male bred in France, and the female in America, will not result in the unnatural or monstrous birth.

MIDDLEBURY, Vt. J. W. JEWETT.

Cochin-China Fowls.

[The following letter gives one of the best descriptions of the superior qualities of this improved and new breed of fowls, that we have seen. The facts are told in a plain, straight-forward and succinct manner, and it gives us great pleasure to publish such a communication on a subject that is exciting a good deal of interest at the present time, and we shall be very glad to hear from the writer again. —ED.]

SAGINAW, May 16, 1853.

MR. JOHNSTONE—*Sir*:—Allow me to say a word on poultry matters. After reading Mr. T. Willey's remarks on Cochin-China fowls, I had a notion to try a pair; and being an old Yankee, from the Bay State, must have my notions gratified, as a matter of course. I sent by a friend, and bought a pair of Cochin-Chinas, for which I paid $5—the hen one year old, the cock two months—both looking very rough, with but few feathers. Oh, if I did not think of Dr. Franklin's whistle, when I received them! Well, I let them out with our other hens, and in six days the hen began to lay, and in 23 days she laid 21 eggs. (I had forgot to say, we got the fowls on the 21st of August.) After laying, she set on the whole, except two, which were missing the first time she came off. The other nineteen she hatched and brought up, except three, accidentally killed. When the chicks were seven weeks old, she began to lay; and upon weaning her chicks—which was on the first day of December—laid 27 eggs in 36 days. Then we broke her up. In 11 days she again laid, and in 23 days gave us 21 eggs. We then (the 8th of February) let her set: the third week she was accidentally shut from her nest, and the eggs all chilled, except three, which we gave to another hen. She then went 23 days, and then laid 23 eggs in 23 successive days: 21st April she set again, on 19 eggs, 3 of which were missing, and one bad, leaving 15. She now has chicks two days old, all smart. One of her fall chicks began to lay at six months old, and has laid 33 eggs in 36 days, and is still laying. Her eggs sell for $3 per doz. The cock is the most beautiful bird I ever saw—weighs 9½ lbs., and eats off a swill-barrel, over which is a two-inch plank, with ease.

I have forgotten to say the fowls were purchased of Mr. T. Willey, of your city, on Miami avenue; and further, I think his fowls answer his recommendation, and are fully entitled to this compliment.

Now, Sir, my Yankee notion is, to keep no common fowls through the winter, as long as Cochin-Chinas can be had at $10 per pair, as we had about as many eggs from one Cochin last January and February as we had from the other sixty; and that, too, after corn, oats, buckwheat, and water with gravel were standing in troughs the whole winter.

There appear to be many and conflicting opinions with regard to feeding fowls. Some say, to lay well, their troughs should never be empty: another says, they must not be fed too much. But after all, we must be our own judges; and I believe our hens did not lay in consequence of being so very fat. I should like to hear some of our friends' opinions upon that—I mean with regard to feeding fowls, both as to quantity and quality; for you must know I put great dependence on our Agricultural Bank, with such a capital. Yours, respectfully,

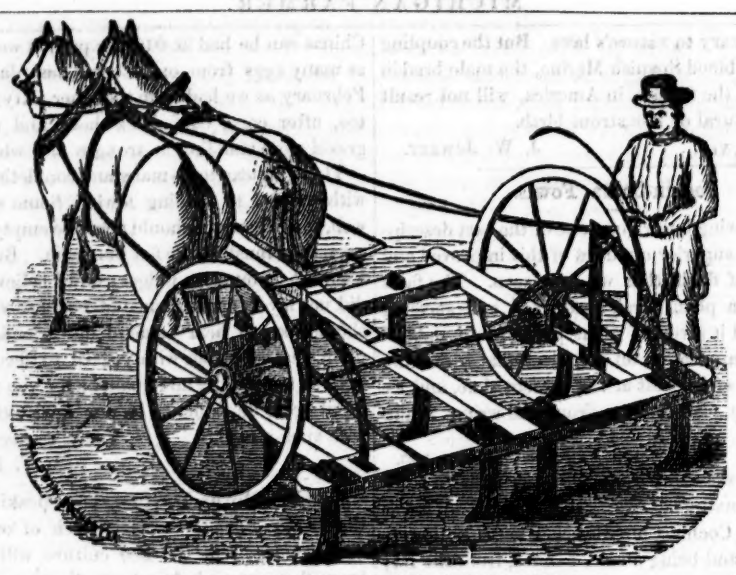
A. F. HAYDEN.

THE BEE MOTHS DESTROYED.—Speaking of bees the *Mobile Tribune* says: "Such of our readers as are engaged in the bee culture will be glad to learn that a remedy has been discovered which effectually prevents the ravages of the bee moth.—The frequent and serious injury caused by this pestiferous insect, has deterred many persons from entering into the business of raising bees, more especially as in some localities the ravages have been so great as nearly to destroy both bees and honey. The plan is this: Split joints of cane through the centre, and arrange them on the four sides of the hive, with the split side resting on the platform.—The moth, instead of depositing its eggs under the edge of the hive, will lay them under the split cane. From these depositories they may be removed and destroyed as often as necessary with little trouble. A friend informs us that he knows the plan has been tried and found entirely successful.

EARLY POTATOES.—George H. Nichols, of West Amesbury, Mass., writes to the *Plowman*:

"I saw you advised farmers, in one of your numbers last spring, to start their potatoes in horse manure. I have followed it for seven or eight years, and find it profitable in two ways: firstly, you get clear of the rot; secondly, you get a good price for your potatoes, and your ground is ready for a crop of pickles or turnips. Potatoes started in this way you get three weeks earlier. A neighbor of ours planted potatoes the 4th of April. He came over to our house a day or two after, and said he should have potatoes in the market first. Mine were then in the hot bed. I began to take mine out of the hot bed on the 28th of April, and finished planting the 1st of May. Now for the difference: I carried potatoes into Newburyport market ten days sooner—the first that were in. They were nearly all full grown; his were small. I carried off 164 bushels of marketable potatoes from July 12th up to Aug. 6th. I had about two and a half acres planted, four feet between the rows, and six inches in the drills; my ridges were broad and flat; I hoed twice."

☞ Pride hides our own faults and magnifies the faults of others.



ROGERS' PATENT WHEEL CULTIVATOR.

The above engraving is a representation of ROGERS' PATENT WHEEL CULTIVATOR, an agricultural implement that has taken premiums at several of the State Fairs in New York, Ohio and Michigan. It is manufactured by Messrs. ARMS & Co., of Kalamazoo, at their Manufactory of Agricultural Implements; and we refer our readers for further information to the advertisement on another page.

RAGE FOR THE RURAL.—There has been a general airing of country-seats during the last two or three weeks. People who are so fortunate as to possess those agreeable appendages to existence, are hastening to them. Many well-known families have already gone—the first of May having released them from hotel and boarding-house engagements.—"Country-life within city reach" is growing in public esteem here as well as in Boston and Philadelphia. Indeed, the passion which now exists in the vicinity of New York for ornamental gardening, cottage architecture, and rural embellishments generally, is extraordinary. It amounts to a rage in some neighborhoods. This accounts for the heterogeneous collection of rural objects now daily exposed in Wall street, to tempt place-owners to buy and take home with them in the afternoon. Frequently one may see between Trinity Church and the Custom-House, Shanghai chickens, Newfoundland dogs, Shetland Ponies, birds, trees, pigeons, goats, roots, shrubs, bulbs and seeds, garden chairs, miniature hot-houses, and newly-invented implements—all displayed on the sidewalk. These, with the usual throng of apple-women, cake-dealers, stock-brokers and expressmen, render the upper part of Wall street almost impassable. The taste for rural elegance is one of which every one must approve, and by which the whole country should be pervaded.—*Home Journal.*

RACING SPEED OF HORSES.—A friend makes an inquiry concerning the rate of speed at which four-mile heats have been run in this country and in England. The greatest speed of American horses is that of Fashion, who, at five years old, in a match with Boston, won two four-mile heats in 7m. 32½s.; 7m. 45s. American Eclipse, in a match with Henry, won three four-mile heats in 7m. 37s.; 7m. 49s; 8m. 24s. Of English horses, Flying Childers, foaled in 1715, ran over the Beacon Course, four miles, one furlong and thirty-eight yards, in 7m. 30s. He leaped with his rider thirty feet on level ground. Eclipse, foaled in 1764, ran four miles at York (1777) in 8m. carrying 168 lbs., or 42 lbs. over the standard weight. It is a rule to allow seven pounds as equal to 240 yards, in a four-mile race, which would make Eclipse's speed equal to four miles in 6m. 27s. St. Bel computes that he could run four miles in 6m. 2s. Both Flying Childers and Eclipse were always winners, and they never met any competitors who could bring out their full powers. Lawrence has observed that they "stand proudly aloof from all rank or possibility of competition." Of late years, four mile heats have seldom been run in England.—*Boston Cultivator.*

☞ We commend the article entitled "On the Duties of Parents," in the Ladies' Department to the attentive perusal of our readers. It contains a discription of life in the woods that a good many will recognize as true to the letter, and which we hope will be read with profit by them.

☞ The longer we live, the more our experience widens; the less prone are we to judge our neighbor's conduct—to question the world's wisdom.

Trial of Reaping and Mowing Machines.

The Executive Committee of the Michigan State Agricultural Society have issued a notice that a trial of reaping and mowing machines will be held at some place to be stated hereafter, if a sufficient number of entries can be procured previous to the 25th of June. As the time and place for holding the trial will be fixed as soon after that date as the Committee can decide that there will be enough of entries to make a competition, it is well enough to state that entries may be made by parties after the 25th, and even up to the day fixed for the trial.

These exhibitions are beginning to be of some importance to the farmer, and if we say a few words on them it will not be out of place at the present moment. Ever since Hussey and McCormick's inventions proved that a crop on ordinary level grounds, that is, land without stumps, or large stones, or other like obstructions could be reaped by machinery, and with horses, constant attempts at improvements and additions have been made. There have also been improvements introduced into the manufacture of the machines, so that they can be sold at a much less price than when they were first introduced. These considerations have made a scale of points necessary for the purpose of judging of the merits of the several machines now before the public. We find such a scale in the circular adopted by the New York Rensselaer County Agricultural Society, which proposes to hold a trial this season, as soon as the state of the crops will permit. From what we know of the practical experience of the gentlemen who drew up this scale, and from its meeting completely the requirements of those who would be likely to purchase, it deserves attention.

The scale is divided into 100 degrees, and each point is set as perfect at numbers which show the importance of a point in making a perfect machine. For instance, the first point is the cost of the machine, which is marked at *ten;* but then again, the durability is considered of more consequence, and is marked at fifteen, so that though a machine may be exhibited which would stand at the highest point when considering its cheapness or the simplicity of its construction, yet in point of durability or the amount of work it would perform in a given time would only stand on the scale at six or seven. When all these points are summed up, after considering the value of each machine with reference solely to its standard value on a single point at a time, the total will show its value and how near it comes to perfection.

The scale adopted by the Rensselaer Society is as follows:

1. Cost of machine	Perfect at	10
2. Simplicity of construction	do	10
3. Durability	do	15
4. Effective power; or power acquired for a given amount of work, including attendance	do	15
5. Rapidity of action; or amount of work performed in a given time	do	15
6. Quality of work, and the manner of leaving the grass or grain	do	15
7. Facility of management; including the time and room required for turning	do	10
8. Adaptation to uneven surfaces, and to cutting at different heights		10
The machine would be perfect at		100

In relation to the quantity of work which these machines will do, as compared with hand labor, the scale is set at 25 additional, as such a comparison does not enter into the comparison between the machines.

Plows and Plowing.

Gent.—I have sat down to give you a little of my experience and some of my opinions about plows and plowing. In the premium list of the State Agricultural Society that a premium of five dollars is offered for the best sod plow for a stiff soil; and also five dollars for the best sod plow for a light soil; and also five dollars for the best plow for old land or fallows. Now I hold that a plow that will turn a stiff clay sod all over, and pulverize it well, is the best plow for any soil. I hold also that single plows will soon be out of fashion every where, and that the double plows and jointers, as soon as their merits become known will take their place. These plows turn everything under, and leave the ground mellow and light, and ground that is once plowed by them, is in better condition than when twice plowed with a cap-furrow so much in favor with some persons. Indeed it strikes me as very strange that there should be any amongst us, who advocate the common lop-plow, when the double plow works so admirably. Give me the plow that will roll the furrow over handsomely, turn the grass well under and completely out of sight, and leave the ground mellow; besides the furrow is wide enough for the team to walk in comfortably, being always twice the width of its depth.

A correspondent, with his name all torn off but an "S," says in the January number of the *Farmer*, that he is in favor of lap furrows, and that he also likes to have the grass grow among his crops, and also that he is not in favor of jointer plows for the reason that they leave the furrow too much up edgeways, now a good jointer rigged right, should roll the sod into a complete string, and this plow, if it is a good one, will wind the furrow nearly half way round it. In setting on the jointer, let the point be about a foot forward of the point of the plow, and about four inches deep; vary your points backward and forward, up and down, till it is found to work in connection with the plow, and it will plow any where, in sod or fallow.—The jointer plow is about the best invention for plowing in manure, also that I have come across, never getting clogged, and covering up the dung out of sight.

I wish very much that the committee on plowing had left these rules for the plowing match, so that the depth of the furrow should not be less than seven or eight inches, and as wide and as deep beyond that as each one might choose to plow, afterwards trying the ground with the cultivator or the harrow, and the plow that was found to leave the soil ground in the mellowest condition to be deemed the best, and awarded the premium.

I plow ten inches deep, and fifteen inches wide; and I say to every farmer who may read this, before he attempts the plowing of his fallows, let him get a good first rate jointer plow, if there is no grass in his fallow, there will be weeds, and I know after he sees how neatly they are buried under the soil he will thank me for this advice.—Besides the jointer plow is just about as easy for the team, and adds but little to the draft.

Hadley, May 23, 1853. Russell Cobb.

[This article was received too late for the June number, in which Mr. Cobb desired it should appear.—Ed.]

Ingenious Device.—The buttons on the coat of John Hancock were of silver, of American manufacture.—The device, a shepherd shearing his sheep—the motto, "you gain more by our lives than our deaths."

MICHIGAN FARMER.

ROBERT F. JOHNSTONE AND WARREN ISHAM, EDITORS.

DETROIT, JULY, 1853.

"Ourselves."

We do not believe in filling the *Farmer* with commendatory notices, but the following from B. P. Johnson, Esq., the Secretary of the New York State Agricultural Society, we think, may prove of some interest to our subscribers:

"THE MICHIGAN FARMER.—Messrs. R. F. Johnstone and Wm. S. Duncklee have become the proprietors of the *Farmer*, and Mr. Johnstone is to have charge of the editorial department in connection with Mr. Isham, its former editor and proprietor. We have known Mr. Johnstone while a resident of this city, and congratulate the farmers of Michigan on his accession to the editorial chair of the *Farmer*. That he will do justice to the paper and to the interests of Agriculture we have no doubt.—*Journal of N. Y. Ag. Soc.*

Premiums to be Awarded.

The first premium for getting subscribers for the 11th Volume of the *Farmer* is awarded to E. H. Johnson, Esq., of Albion, Calhoun Co., who procured over one hundred names, nearly all new ones.

The second premium falls to O. H. Lee, Esq., P. M., Ypsilanti, who comes a little short of one hundred. There are others who are not far behind these two, as Phillip Marlatt, Esq., of Hickville, Oakland, A. G. Eastman, of Adrian, &c.

Those entitled to premiums in books, can have the back volumes of the *Farmer* on application, and Mr. Isham's travels, as soon as published.

LENAWEE COUNTY AGRICULTURAL SOCIETY.—We have received a copy of the constitution and by-laws of the Lenawee County Agricultural Society, and the following is a list of the officers and executive committee for the present year.

President—Samuel Rappleye, of Ridgeway.

Vice-Presidents—P. J. Spalding, Adrian; A. J. Hunter, Franklin; Edwin Smith, Clinton; D. H. Deming, Dover; Samuel Conklin, Raisin; Wm. Tenbrook, Fairfield; Geo. C. Harvey, Palmyra.

Secretary—Thomas M. Cooley, of Adrian.

Treasurer—Wm. S. Wilcox, of Adrian.

Corresponding Secretary—Robert R. Beecher, of Madison.

Executive Committee—From Adrian, David Horton; Blissfield, Joel Carpenter; Cambridge, John Morton; Dover, Marvin E. Palmer; Fairfield, Davis D. Bennet; Franklin, John M. Merrit; Hudson, Daniel R. Daniels; Madison, Augustus W. Bradish; Macon, Simeon Davidson; Medina, John G. Smith; Palmyra, Edward Underwood; Raisin, John Richards; Ridgeway, Aug's Montgomery; Riga, Jonathan M. Gillam; Rollin, William Beal; Rome, David Sharer; Seneca, Richard Kinney; Tecumseh, R. B. Gillespie; Woodstock, Hiram Smith; Ogden, James C. Eddy; City of Adrian, R. Bidleman.

THE GENESEE COUNTY AGRICULTURAL SOCIETY.—A letfrom F. H. Rankin, Esq., the recording secretary of the Genesee co. Agricultural Society, has been received, giving the information that a list of premiums to the amount of $295 25, independent of discretionary premiums, had been prepared and adopted by the executive committee of that society, and that the next annual fair will be held on the 5th and 6th days of October.

The officers for the year are as follows:

President—Benjamin Pearson.

Vice-Presidents—From Argentine, Isaac Wixom; Atlas, O. Palmer; Clayton, James Brown; Davison, Daniel Dayton; Fenton, Wm. Tanner; Flint, Grant Decker; Flushing, G. W. Thayer; Forest, H. D. Seeley; Gaines, James Van Fleet; Genesee, J. W. Begole; Grand Blanc, C. S. Thompson; Montrose, John McKenzie; Mundy, John Richards; Richfield, Wm. J. Phillips; Thetford, D. F. Bennett; Vienna, Grosvenor Vinton.

Recording Secretary—F. H. Rankin.

Corresponding Secretary—Levi Walker.

Treasurer—E. H. Hazelton.

Executive Committee—N. H. Chittenden, D. N. Montague, R. B. Perry, Jonathan Dayton, C. H. Rockwood.

Auditors—William Paterson, G. S. Hopkins.

LAPORTE COUNTY FAIR.—We received, a little too late for a notice last month, a large and well arranged show-bill, very handsomely printed by the Laporte *Times*, displaying the rules and premium list of the Laporte County Agricultural Society, in the State of Indiana. We had no idea that there was a county society so spirited and so well organized in any part of Indiana, or in fact in any of the Western States, as their premium list shows this to be; the list is full, and will draw out, we have no doubt, not only from Laporte co., but also from Northern Indiana and the southern counties of this State, a healthy competition, which will effect much good.

We learn that the society possesses fine grounds for this exhibition, which were handsomely fenced in last year, and will be permanent. The fair promises to be one of the best arranged agricultural exhibitions in that section of the West, and deserves to be sustained. Situated in a rich and fertile portion of the State of Indiana, which is easily reached by railroad, there are few places which exhibitors of stock, or of new improved implements would find more advantageous to visit and to exhibit their articles.

☞ The Directors of the Association for the Exhibition of the Industry of all Nations, to be opened in New York, respecting which so much complaint has been made in consequence of the repeated postponements of the period of opening, have at length announced through a circular, a copy of which will be found in this month's paper, that the Crystal Palace will be ready for the reception of visitors positively on the 15th of the present month. This will be gratifying intelligence to the numerous persons who have taken an interest in the forthcoming exhibition; and furthermore, the directors confidently anticipate the most perfect success as regards their difficult enterprise, the contributions being much more numerous than it was expected they would be.

☞ Our thanks are due to Gen. Cass for copies of the Patent Report for 1851-52.

☞ A copy of the address delivered by WILLIAM S. KING, before the New Hampshire Agricultural Society, with the remarks of the Hon. FRANKLIN PIERCE, has been received.

BIGARREAU CHERRIES.—Mr. Bradley, of Plymouth, near Northville, favored us with some fine samples of Bigarreau cherries, about the middle of June. They were perfectly ripe. Mr. B. said that last year both his cherries and plums were destroyed by the curculio, but this year, he let his fowls, of which he has about sixty, have free range of the orchard, and by occasionally jarring the trees, during the day, he has every prospect of a first rate crop of fruit. The Apples in his neighborhood do not promise so well as they did last year.

MARKETING WHEAT.—We have received a communication from A. R, relative to marketing wheat. We have not room to insert it this month, but will give it room in the next number, with some remarks on that important subject.

DORKINGS.—W. E. H. Cressy writes that he selected some Dorking fowls from Mr. Dougal's stock, in Canada West, and he believes them to be all that Eben Wight represented them to be. One pair now weighs over fifteen pounds. Mr. C. is making preparations to bring some of his stock to the State Fair, where he intends to "take down" all competitors, both in variety and excellence of the poultry exhibited by him.

☞ Mr. Henry Hall, of Dexter, writes to us inquiring as to the mode of raising pigs from a *sow* and *barrow* mentioned by J. Woodworth, in a communication published in the June number. It is presumed that in the letter referred to, Mr. Woodworth made use of the word *barrow* as refering to his male hog, instead of using the more correct word *boar*. *Barrow* we have often heard used in this sense by farmers, though it is an improper application of it, as it is a word that refers solely to the male animal after it is deprived of its ability to breed.

PITTS SEPARATOR AND HORSE-POWER.—We call the attention of those, about to make purchases, to the advertisement of John A. Pitts, of Buffalo.

MOORE'S WHEAT DRILL.—We call the attention of our readers to Mr. Haviland's advertisment, of Lewis Moore's Wheat drill. He makes them favorable offers.

SALE OF CATTLE.—Attention is requested to the advertisement of the sale of full blood cattle by the well known and distinguished breeder of full blood cattle, Lewis F. Allen, of Black Rock, in this number of the *Farmer*. The location is so convenient, it will probably tempt some of the enterprising farmers of this State to be present at the sale.

WHEELER, MELICK & Co.'s HORSE POWERS.—We again call attention to the advertisement of the superior horse powers and grain separators which this firm offers for sale. By a mistake of the printer, the cut in the last number, which was a representation of Emery & Co.'s Horse Power and Thresher, did not represent the machines advertised by this firm, but the cut in the present number is a correct representation of their machine at work.

THE FARMER FOR JULY.—The *Farmer* for July has been detained a few days beyond the time, we intend to get it out regularly, for the future, because we waited for a full supply of new type, which we did not get in time to use. Itwill be seen that the greater part of this number is printed on fine, new, bold and clear faced type, easily read by those who have to use glasses.—The next number will contain other improvements which we hope will meet the approbation of our friends.

AGENT IN LAPEER.—A. C. Maxwell, of Lapeer, has kindly volunteered his services to act as agent to receive subscriptions for the *Michigan Farmer* in Lapeer, and we have accepted them.

We received a communication signed "Pittsfield" dated on the 18th, and Saturday the 25th through the Post Office. It was too late for publication, besides as we had no name given to us as that of the author, no matter how well deserved the criticism, we could not publish it. We should like to hear from the writer, at an early day. His remarks on "Cleveland Bays" are pretty correct, for we don't believe that more than one or two horses of that breed have ever been brought into the United States, if there has been any, of which we are not positive.

☞ "Ruby" shall have room at the earliest moment, but a compliance with our rules to admit only the useful and the practical would put the rather sentimental communication tendered to us almost beyond our pages.

"Straws" in next number if possible. His statement is remarkable.

"Wood" and "Cranberries" shall be attended to in the next number.

The "Subscriber" who hails from Olivet, shall have as many of his questions answered next month as we can spare room for. Some of them need room and time to answer correctly and usefully.

☞ The new publishing firm of *Kerr, Doughty* and *Laphan*, it will be seen by a reference to the advertisement, announces they are ready to furnish school books and other publications in their line at a low rate.

CHITTAGONG AND SHANGHAE FOWLS.—Mr. Prudden of Ann Arbor, advertises that he has for sale some of this fine stock of the improved breeds of fowls at reasonable rates.

FINE CHERRIES.—On Saturday, the 25th ult., Mr. E. Mixer, of the Elmwood Nursery, near this city, bro't us some twelve specimens of fine choice cherries, from trees which he has growing in his Nursery. These trees he received from Rochester, when they were but one year old from the bud, and he has had them now two years; showing plainly that none need wait for a life time to have as good an orchard as they may wish for. Among the sorts were the flesh colored Bigarreau, Early White Heart, Black Tartarian, Burr's Seedling No. 1, (very choice,) Tradescant Black Heart, May Duke, Madison Bigarreau, Napoleon Bigarreau, Holland Bigarreau, Elton, Early Richmond, and the new French kind called the Anglaise Prune.

HORTICULTURAL DEPARTMENT.

S. B. NOBLE, EDITOR.

Training Fruit Trees with Low Heads.

We have been gratified lately in noticing many of our exchanges editorials as well as correspondents urging the propriety of so training apple and other fruit trees, either for the orchard or fruit yard, with low heads; say, from the heads with the branches coming out from one and a half to three feet from the ground. This mode of training standard trees is undoubtedly the most natural for the tree, the most beautiful, and all things considered the most economical. We have long thought it mistaken policy to trim trees with a special object of plowing under them. A plow should *never* be permitted to go so near a tree as to disturb the roots, or the whiffletrees to bark the trees. Nothing is gained by it. The soil should be well cultivated, but let it be done with a spade and hoe; the expense is *not* materially increased. When we take into consideration the increased expense incurred in gathering the fruit on high trees over that on low trees, which in very many cases will be double, besides much of the fruit will be bruised and almost worthless, we decidedly give the preference to low trees. We do not intend in this article to convey the idea that old-established trees can be materially altered in their shape; but perhaps in one-half or three-fourths of the orchards the form of this may be so altered that the heads may be formed to suit the desire of the cultivator; and in a large proportion of cases the branches may be permitted to put out as low as a foot from the ground, and form a fine handsome top. We remember once of seeing, in our youthful days, a famous fruit-yard, containing apple, pear, peach, plum and cherry trees, with the branches coming out about a foot from the ground, with round, handsomely-formed heads, the trees loaded with fruit. We think we have never seen anything to compare with it for beauty. We do hope our farmers will abandon the old plan of high-trimmed trees, and adopt the one which for symmetry, order and economy cannot be surpassed. It is quite often that small trees have a tendency to put out branches low. A proper number of such may be permitted to grow for the purpose of forming a low head, and in a few years the entire appearance of an orchard may be changed. *N.*

Death of Apple Trees.

In several back numbers of the *Farmer* many interesting articles have appeared on the decay of apple trees, from which much valuable information has been obtained. We have refrained from saying much upon the subject, for the reason that it was in good hands. We feel a personal interest in the matter, having several large trees, the bark of which has been killed upon the south-west side, perhaps one-fourth of the circumference of the tree, and in some cases extending upwards only a few inches, but in others nearly two feet. The trees will average perhaps ten inches in diameter, and were seedlings of an inferior kind, grafted at standard height and mostly very thrifty, and bearing good crops of fruit. The trees have not been deprived of any portion of their top during the last three years, with one exception, and that pruned with a light hand. In no case have we had a tree that was root-grafted injured; and among our root-grafts are Newtown Pippin, Rhode Island Greening, Scarlet Pearmain, Fall Pippin, Winter Pippin, and Winter Greening, all of which have been uninjured.

We have now a tree nearly dead from another and unknown cause under the following circumstances:—The tree is about ten inches in diameter, a seedling grafted standard height, with Pumpkin Sweeting, has always been thrifty, bore fruit last year sparingly, yet appeared healthy; this spring it blossomed quite full. On discovering that no leaves put out, we were led to an examination and found the bark yet green around the entire circumference of the tree, but by digging around the roots we found them *all* to be so dead that the bark had turned brown. The cause for this we are unable to give. The tree in question has not had any adverse influences to contend with more than others; has not had any of its top removed for two years. If any of our readers have had trees similarly affected we should be glad to hear from them. *N.*

Will late-keeping Apples deteriorate?

An important question to fruit-growers, which has not yet been examined, is whether some varieties of apples will deteriorate as to their late-keeping qualities by being removed to the westward and of course somewhat different climate, or if they retain their original native qualities. Is the variation that sometimes occurs owing to some peculiarty of the season in which they are grown? It is of some importance to individuals setting out orchards, to know when they get trees of a certain kind of fruit that they have the qualities of the originals. If a tree is purchased for its late-keeping qualities it is desirable that it should possess those qualities, otherwise an orchard may be set out, all fruit in which will ripen about the same time; and no sane man we think would do that knowingly. Take a few varieties for an example, say the Swaar, Rhode Island Greening, Roxbury Russet, and the Yellow Newton Pippin. With us when the above come into bearing they would keep about as follows: The Swaar till May; the Rhode Island Greening till March and April; the Roxbury Russets till June; Newton Pippins till June; but now the trees have been in bearing about twelve years, the fruit has gradually changed, and the Swaars are in perfection in January; the Greenings in December; the Russets in February; and the Newton Pippins in March. There must be some cause for this change. We are not willing to admit a want of care for the orchard. If similar changes have been taking place in other orchards we should be glad to hear from those interested. If it proves to be a fact that climate has effected the change, let those intending to procure varieties of fruit with reference to their keeping qualities, understand it to prevent dissapointment. *N.*

Training Peach Trees.

By the time this number will be in the hands of its readers, all apprehensions of a late frost will be over, and from present indications the peach trees will be loaded with an excess of fruit. In many cases one-

half had better be removed; the remaining half will be worth more than the whole will be if left on the tree. Now to accomplish this, it is recommended to all such as have not already trimmed their trees according to the shortening-in system, to cut off about half, and in some cases more of the last year's growth, with the fruit on. This will thin your fruit and at the same time trim your trees. Much is lost by permitting trees to overbear in the size and quality of fruit and growth of the tree. The shortening-in mode of pruning is unquestionably the best; and we all dislike the old mode of training, leaving a tall naked trunk and branches. It should always be borne in mind that peach trees, unlike many kinds of fruit trees, *always* bear fruit on the last year's growth, and *never* on old wood; therefore cutting off the ends of the limbs promotes a new growth on the next year's fruit. N.

[From the Milwaukee Sentinel]

What are Dwarf Pears?

This question has been frequently asked this spring, and in a desultory sort of a way. I propose to say a few words on the subject. A Dwarf Pear is a pear budded or grafted on a stock which, while it dimiuishes the size of the tree, renders it immediately productive. For this purpose have been used the Quince, the Thorn, the Mountain Ash, and even the Apple. The Thorn makes a tolerable stock, and was formerly employed pretty extensively. The common quince, however, superseded it; but the trees were short lived—or at least very uncertain in their duration. This stock is now rejected by good Nursery-men (though largely used by some,) and the Angers Quince (a free growing French sort) has been adopted in its stead. This last promises all that can be desired for the purpose of dwarfiing the pear. The finest specimens of these trees which I have seen, are in the ground of Messrs. Hovey & Co., near Boston. They border the avenues of their nursery, are about fourteen years old, as many feet high, branching from the ground, perfectly pyramidal in shape, and were at the time I saw them, (last October,) *loaded* with most superb looking fruit. On the grounds of Marshall P. Wilder and of Mr. Walker, where thousands of trees standing *twelve inches apart*, in nursery rows, and they were almost without exception, bearing enormously. One may hardly say "comical" of a pear tree, but it *was* "comical" to see the young "Bartletts"—little striplings of less than an inch in diameter—staggering under a load of fruit that in some instances would have out-weighed the tree—roots and all! Many varieties which are harsh and gritty on the pear, are sweet and melting on the quince. There are some which are first rate on the pear, that will not do well on the Quince; Duchesse d'Angouleme is a notable instance of the former, and Beurre Bosc of the latter. Buyers have reference to these facts in their selection of varieties. Some of the good qualities of this class of trees, may be briefly summed up thus:

They will almost invariably bear at three years from the bud or graft—some varieties at two years.

They may be very properly planted at eight feet apart but ten or twelve feet is a better interval.

The fruit is borne within reach of the eye and hand of the owner.

Having an abundance of fibrous roots, the trees may be moved at any age without essential detriment.

They will bear well without any particular care, but they really deserve and will amply repay the most especial attention. The theory of managing them with reference to shape and productiveness is very simple, but withal just complicated enough to render various practical processes in their cultivation very interesting to those possessing a spark of Horticultural fervor.

In conclusion, a word or two about planting:

Make the holes large—at least four feet in diameter—six feet is better. The depth should be determined by the nature of the soil. Deep planting in a pit holding water will prove disastrous. In a stiff clayey soil, plant near the surface, and rely on "mulching" to keep the roots cool and moist. On such a soil, with shallow planting, make your holes *large in diameter*; fill up the hole with a rich compost made up of good loam and well rotted manure, *thoroughly intermixed*. Plant the tree to the junction of the scion or bud with the stock. The object of this is (by keeping the stock moist) to cause it to swe l and keep pace with the growth of the scion. Purchasers should avoid buying a tree which has been "worked" so high as to render such planting improper.

The only general rule that can be given in respect to "heading back" is to cut back the growth of the previous year *at least* one half its length. Finish up the work by mulching or covering the whole surface of the excavation with two or three inches of straw, or light short manure. Sub Rosa.

Prof. Kirtland's Seedling Cherries.

We find the following letter from Dr. Kirtland in the April No. of Hovey's Magazine. It tells its own story.

To Joseph S. Cabot Esq., President of the Mass. Hort. Society:

Dear Sir:—Not knowing who at this time, is the corresponding secretary, I have taken the liberty to address the Society through your medium, and also to forward to you, for them a box of grafts.

I am aware that it is making a heavy draft on the credulity of an intelligent Society to solicit from them their confidence in twenty-two new seedling varieties of the cherry—yet scions of that number are embraced in the box. I hope they will accept of them, and make such disposition of them as will ensure a careful and thorough testing of their qualities. When that shall have been accomplished, I trust the Society will award them their true merits; and, should I be among the living at that period, I hope to learn from the Society the name of any cherry which equals the Gov. Wood;—of any two which equal Gov. Wood and Kirtland's Mary;—of any three which are more valuable for the table and the market than Gov. Wood, Kirtland's Mary and Black Hawk;—and of any twenty-one kinds, foreign or American, which, taken collectively, will excel that number embraced in the enclosed catalogue, excluding the "Leather Stockings." Having tested them all for from three to five or more years, I have no fears of the result of such a comparison.

These, with the exceptions of Nos. 3, 4 and 22 of the list, were raised from pittes of the Yellow Spanish, probably hybridized by the Black Tartarian, Black

Mazzard and May Duke. No. 3 and 4, sprung from a Morello tree standing in contact with a Carnation cherry tree.

Very respectfully yours,

JARED P. KIRTLAND.

EAST ROCKPORT, Cuyahoga co., Ohio, Feb. 3, 1853.

LIST OF GRAFTS FORWARDED TO THE MASS. HORT. SOCIETY, BOSTON, FEB. 3d, 1852.

1. *Tecumseh cherry.*—Large; black; fine flavor; valuable.
2. *Red Jacket.*—Size medium; color red; flavor good; mature late.
3. *Shannon.*—Large and fine Morello.
4. *Kirtland's Large.*—Very large Morello and very fine.
5. *Kirtland's Mary.*—Very large; amber colored; prolific; flavor excellent Considered as one of the best.
6. *Elliot's Favorite.*—Size below medium; color and flavor resemble Bell de Choissy.
7. *Delicate.*—Size medium or above; color and flavor like No. 6. Both among the best for the table, but too tender for market.
8. *Doctor.*—Size medium; amber colored; flavor delicate; ripens early—with the Early May; prolific to a fault.
9. *Cleveland.*—Large; amber colored; fine flavor.—The fruit sold for $7 when the tree was nine years old from the seed.
10. *Leather Stockings.*—Large; hard fleshed; color deep red, with irregular stripes and blotches of black; flavor deficient, A curiosty.
11. *Gov. Wood.*—Very large; splendid amber colored; flavor delicate, rich and sweet; prolific. The best of all cherries.
12. *Late Bigarreau.*—Resembles the Yellow Spanish in size. color and flavor; ripens two weeks later. Valuable.
13. *Black Hawk.*—Very large; glossy black; firm flesh; good flavor; prolific. Best of all cherries for market.
14. *Rockport.*—Large, amber colored; delicious; and prolific. Somewhat variable in its qualities in different seasons.
15. *Logan.*—Large; black; fine; valuable.
16. *Osceola.*—Large; black; fine; valuable.
17. *Jockosott.*—Large; black; fine; valuable.
18. *Brant.*—Large; black; fine; valuable.
19. *Pontiac.*—Large; black; fine; valuable. Resembles Knight's Black Eagle, but is far more prolific.
20. *Powhattan.*—Size medium; liver colored; good flavor. Popular in the market.
21. *Keokuk.*—Large; black; firm flesh, coarse grained, and not high flavored. Good for market.
22. *Kirtland's Mammoth.*—Size very large; amber colored; fine flavored. Growth of foliage and wood enormous. Does not fruit while young.
23. *Kirtland Pear.*—Seedling of the Teckel, raised by my brother, H. T. Kirtland, Esq., of Poland,—first rate.

Orchards—Plums—Wheat Drills—Agricultural Education.

NILES, Mich., March 26, 1853.

FRIEND FARMER:—I am an old man, and feeble at that; farming is my occupation; I removed to the farm I now occupy in 1832. My land is a rich loam, with a stiff clay pan, and when I settled, it was very heavily timbered. Considerable of my cleared land is free of stumps, and I have tried to procure the best agricultural implements that could be obtained. I looked out early for an orchard, having a great pleasure in seeing and possessing good fruit, which I have in an orchard of the most approved varieties. I had no thought then, neither have I now, of making a business of marketing fruit, but I wanted good fruit for my family, and for my stock, principally hogs. With considerable trouble and some expense I procured a good variety of plums, and have had them in a bearing condition for some years; but the plum-weevil, this pest, has baffled all my expectations; and owing to the severity of the winter of 1851-2, several fine trees were killed, as well as my nectarines, and also sweet cherries. The curculio does not breed in my plum orchard. I have all the affected plums regularly gathered and burnt. But my peach orchard is within six rods of my plum orchard—that is where they come from. I have had my hens cooped with their young brood, and the fowls regularly fed in it, without any good effect; they fly and light on the trees, and there continue unless a strong wind occur, or the tree be roughly shaken. I have looked well to their habits. I put in my hogs, but they would not eat the sour things unless they were starved. I have partially succeeded by spreading white sheets under the trees, then jarring the tree briskly, when they will fall; I then kill them between the thumb and fingers. To jar the trees without injury, I procure a stiff staff three feet long, with a fork at one end, and a short one five feet long, and wrapped the forks with old cloth to prevent barking the tree. I sawed the other end square off, the long one I used for upper limbs and the top, and the shorter for the lower limbs; then with a mallet I gave one or more brisk strokes. This I have done morning and evening. True, as Mr. Downing says, they will be found more plenty in the first few weeks of their appearance, but they will continue on till fall, and will breed in various fruits.

I have been convinced that nine inches is too wide for a wheat drill, and have formed for my farm one of a simpler construction that will drill wheat, oats, or millet, and will plant corn. This I have set eight inches apart; by the means of pullies it drills. Then we must have a wheat hoe, for drilled grain will not keep under the weeds as well as broadcast. It should be light, so that a man and one horse would be sufficient. You wrote when in Europe of such an implement. Do give your readers such a minute description of it that they may have the benefit of the plan. It must be as broad and have as many hoes as the drill.

You tell us of Uncle Aaron and his plow. Has he been the means of rendering to the cultivators of the soil an implement worthy of their patronage? Then we wish to form a better acquaintance with him. Tell us where he resides, and where his plows are made.

My dear sir, let us have a State Agricultural Convention to devise means for a State Agricultural Institution, where our sons may obtain such necessary knowledge as will qualify them for that lofty pursuit in life for which Nature's God has endowed them. Let it be brought to bear before the meeting of the next Legislature. Let the thing be much agitated. I believe the farmers of Michigan are ready. Let it have no connection with the University. Let a delegation be appointed by the Convention to wait on the Legislature with its resolves. Let our Members in the National Government be importuned to use every honorable effort to obtain a large grant of land for every State in the Union. Let a copy of the proceedings of the

*Jockosott, a noble Sioux Chief, who died in Cleveland, some ten years since,—to whose memory the citizens erected a monument in the public cemetry.

Convention be sent to the Governor of every State, to be laid before the respective Legislatures for action. Then the Smithsonian Institute would be available.

In common doings I cannot take a thing for granted unless I or some one else has proved it a fact. Now we are told the queen bee lays all the eggs in the hive; therefore a large hive will have no more bees than a small one. Will some of your correspondents tell how that was found out?

I am, dear sir, your friend, WM. T. NOEL.

Peppermint—Inquiry.

YPSILANTI, June 6, 1853.

MR EDITOR:—I wish to make an inquiry through your valuable columns in relation to the growing, distilling, and sale of Peppermint Oil; the kind of soil; the average yield and the net profit per acre, as I am well convinced some of your readers are pretty well posted in such matters. And also the expense of getting up the apparatus for distilling and working from 12 to 20 acres; and whether it is a hard sward to subdue by summer-fallowing or planting, &c. Yours, respectfully,

YOUNG FARMER.

A PROFITABLE HEIFER.—Miss Mary Brice of Albany county in the State of New York, owns a heifer named Cherry remarkable for her production of butter. The lady makes the following affidavit, relative to the amount made from this heifer during the past winter, and it is well worth reading:

Joint Affidavit of Mary Brice and Bridget Dunn.

Being first duly sworn do depose and say, that we have made from the cream of said heifer Cherry, from Nov. 11, 1852, to May 29th, 1853, being 200 days in succession, including the dead of winter, 194 lbs. 11 oz. of butter, down weight, every churning (56) being by us weighed, booked and dated immediately on being churned; that in our former affidavit, made Feb. 28th, 1853, before John R. Radley, Justice of the Peace of Albany county, N. Y., and to the amount of butter made by us from the cream of said heifer Cherry during the first 100 days after she came in the 2d time, we allowed 14 lbs. waste of butter in creaming her milk to feed her calf (called) Pink, which was raised at the same time, which we concluded very reasonable—total in the 200 days, 208 lbs. 11 oz.; that we have allowed nothing for waste in creaming her milk to feed her calf the last 100 days, though there were some.

MARY BRICE.
BRIDGET DUNN.

The person who publishes the affidavit, states that Cherry's feed during the last 100 days was hay and about 4 quarts of shipstuff twice a day. May 14, 1853, she was put in pasture.

VINEGAR FROM BEETS.—Good vinegar is an almost indispensable article in every family, many of which purchase it at a considerable annual expense, while some use but a very indifferent article; and others, for want of a little knowledge and less industry, go without.—It is an easy matter, however, to be at all times supplied with good vinegar, and that too, without much expense. The juice of one bushel of sugar beets, worth twenty-five cents, and which any farmer can raise without cost, will make from five to six gallons of vinegar, equal to the best made of cider or wine. Grate the beets, having first washed them, and express the juice in a cheese press, or in many other ways which a little ingenuity can suggest, and put the liquor into an empty barrel; cover the bung-hole with gauze and set it in the sun, and in twelve or fifteen days it will be ready for use.—*Farmer and Mechanic.*

Rambles.—No. 1.

BY S. B. NOBLE.

Not many days since we made a delightful excursion over the Michigan Central Railroad to the "Garden City" Chicago, the western terminus of this road. The Central road is now in fine order and doing a first rate business, as is manifested by the immense number of passengers, who daily pass over the road, and the large amount of freight. The cars are finished in good style, with a special reference to the comfort of passengers. The Conductors for urbanity and manners, gentlemanly deportment and care for those who commit themselves to their keeping, cannot be excelled upon any other road. Every thing on the road and all connected with it moves in harmony like clock-work.

On a delightful morning we left our home, accompanied by our better-half. After the usual stoppage, to leave and receive passengers, the iron horse full of steam power, with head erect, left the Ann Arbor depot, moving off with majestic strides, drawing in his train several cars well filled with passengers. The rapidity of his movement prevents one from viewing at all times the scenery as they pass, or rather *whirl* along, leaving things looking like a *streak* on either side, half seen and yet unseen.

Now the riding on a railroad has a great tendency to mix up the high and the low, the rich and the poor, the rosey healthful cheek and the despairing invalid, and makes one feel at home; old acquaintances are renewed, new ones formed, and with those who are disposed to chat, objects of sufficient interest are found along the road as subjects for social converse. All seem anxious to move along in rapid motion, At the various depots all are in motion, passing to and fro along the cars, hoping to recognize a long expected father and mother, brother or sister, or shake the friendly hand of an old and valued friend.

Chicago the terminus of the Mich. Central, as well as of the Michigan Southern road, is destined to be the great emporium of States west of the lakes. It is fast increasing in population, wealth and commercial importance, and will be the terminus of some thirteen Railroads, nearly half of which are now in successful operation.—The town is neatly laid out on the shore of the lake, extending backward on the prairie; it shows an activity in its business, scarcely equaled by any city of its size.—While strolling through the streets, we chanced to spy the sign of the *Prairie Farmer;* venturing in, stranger as we were, we found the general editor, safely moored in his *big arm chair* with the dignity becoming the editor of an agricultural paper, which should be the pride of the Prairie State. Its horticultural editor we did not see, being absent; after a short and agreeable chat with friend Wight, we took our leave, feeling the more cheerful for our call, receiving from him the June number of his valuable paper, in which we found many things to amuse and instruct us while we whirled through the air on our home-ward passage.

Niles we find to be a place of considerable business, situated on the banks of the St. Joseph river in a rich farming country. Our stay at Niles being short, we could not visit any of its enterprising farmers, but as we whirled

along we could spy in the distance many a well cultivated farm.

At Kalamazoo we tarried part of a day; its streets were alive with teams from the surrounding towns, many of them richly laden with wood, which there were many eager to obtain at fair prices. All seemed life and vigor, population and business on the increase. The town, or "Burr Oak village," as it is significantly called, is handsomely laid out, some fine blocks of stores with many desirable residences. We visited Firemen's Hall, a large stately brick edifice, built in good modern style; it makes a fine appearance and is centrally located, and does honor to the enterprise of its inhabitants. On the first floor is the Post Office, finished in a style superior to any we have noticed in the State. On the first floor are also other offices. On the second floor is a large and commodious hall, well lighted and ventillated, capable of seating an audience of a thousand and over; in the rear on the first floor is the engine-house, amply large for the purpose designed. The farmers of Kalamazoo should be proud of such a stately edifice at their county seat. In our stroll through the streets we were attracted to the machine shop of A. Arms & Co., whose advertisement may be found on the cover of this number. They are extensively engaged in the manufacture of various implements of husbandry, just such articles as farmers need, and they will undoubtedly patronize an establishment where articles are got up in good and desirable style. The town presents a degree of activity and an amount of business, rarely equalled by any town of its size.

Then there is Battle Creek not a whit behind its neighbors, full of life and activity, whose business is on the increase. Any place surrounded as Battle Creek is with a rich farming country and enterprising farmers, who are daily pouring into its lap the produce of their farms, must and will prosper.

At Marshall, on our tramp through the town, we found our old friend Dr. Montgomery snugly stored away in the Post Office. The Doctor will care for the interests of the *Farmer*, and will receive subscriptions and remittances and transact any business connected with it. Marshall is a fine business town with an active and enterprising population and with a good farming country to support it.

On the line of the Railroad the crops, in general, look well; in some locations the corn is behind time but of a good color, and now bids fair for a good crop. Wheat is now (June 14) in full head, and in the main looks well; and judging by the highly cultivated farms along the line of the Railroad, the large flocks of sheep, herds of cattle, horses, with swine and poultry in abundances, Michigan will soon rival her elder sisters and not fall behind the Empire or Buckeye States. We wish, however, our farmers had paid a little more attention to adorning their mansions with ornamental trees and shrubbery, and not have destroyed so many of the native forest trees which would be an ornament to their dwellings and a pleasure to their families; but we see an increasing interest manifested in this respect, and hope ere long to see every farmer's mansion surrounded with ornamental trees, shrubbery and a flower garden. We hope soon to visit many other towns and villages along the line of the railroads, and to call on some of our friends.

LADIES' DEPARTMENT.

On the Duties of Parents in the Woods.

BY A LADY IN THE WOODS.

There is a class of farmers in whose hands we fear the Michigan Farmer is seldom found, nevertheless we wish to addres a few words to them and do it here, hoping some chance wind may blow the leaf in their way. It is the very class of which "Enquirer" writes in his "search for a wife," the A's. That particular family however had one redeeming trait; they were industrious, but they had certain unmistakable marks by which the whole tribe are known. There is a want of order and neatness, a disregard of everything pertaining to refinement of mind and manners about them all, and they are needlessly and criminally behind the times. This results more from idleness than from ignorance or a lack of ability to inform themselves.—They have no means of spending their time in fashionable folly, no pianos to thrum, no "last new novel" to loiter over, no going to concerts or playhouses in the woods, nor even the gossiping circle of the bar-room or black-smith's shop to entice them from duty. They lack energy. They go through the world like sleep-walkers with their eyes open yet seeing nothing. They drag out year after year, and make a bare living from a farm which if rightly tilled would place them on a level with their more spirited and envied neighbors.

Let us give you a sketch from life. There is the "shell of a house," and the rail-fence in front, but the pig-trough is not under it, for although the family have lived there six years they have never had a pig-trough yet—they have not time to make one. Mrs. T. saves her kitchen slops (what she does not throw down by the back door) in a large iron pot, and when that is full she sets it by the front gate, inside the yard with one of the children to stand by and let in one pig at a time till each has had a taste, or rather a smell of it; for by the time the second one is to be turned out, if not before, the pot is upset in the struggle between the hog and the child, the gate is unguarded, and the outsiders rush in "en masse," and lick up what they can get from the ground. The children consider themselves fortunate if this "feeding" does not end in a half day's chase over the garden and cornfield.

When these porkers are put up 'to fat' there is a hole made in the ground in one corner of their pen, and water is poured in that for them to drink. The family seldom have a stick of wood cut before it is wanted, though the wood-pile lies very conveniently by the front door; for Mr. T. finds it much easier when he brings up a 'jag' from the woods to throw it over the fence there, than to pull down and put up the rails, as he must do if he takes it to

the back door. There are two or three broken sleds and part of a harrow on one side of the gate, on the other side the wagon and cart stand when not in use, and piles of old boards and bricks and rubbish of all kinds fill the fence corners. A miserable log shed stands as an excuse for a barn, the cattle are unsheltered in winter, and everything about the premises wears an aspect of negligence, or rather of downright laziness. And who are the managers of this farm? A father and two stout sons nearly grown to manhood. The soil is productive, their cattle prosper in spite of neglect, and yet poverty seems to be their inheritance.

Let us glance at the arrangements within doors. Everything there corresponds with external appearances. The mother is a late riser, and the daughters follow her example; breakfast is late, but the father and boys have only managed to get a part of their morning 'chores' done; the rest are to be done whenever it is most convenient, often they are quite forgotten. The house floors are full of cracks, uncarpeted and far from clean; but then the rain-barrel leaks, and it is such hard work to draw water from the well for cleaning. And no wonder. The well is upward of sixty feet deep, the water is to be drawn by a windlass, and the bucket is a dish-kettle attached to a clothes-line!

We will not specify further particulars, but look at the consequence of this mode of life in its effects upon these young children. The oldest boys have already gone too far in their father's footsteps to be redeemed, we fear, unless some thrifty, energetic farmer's daughters should take them for husbands from pure philanthropy. We set no bounds to woman's influence, and there may be those capable of inspiring even Mr. T.'s sons with something like life. But those blooming girls and the bright-eyed little ones who are fast coming up to fill the places of their elders, surely something might be done for them. Alas, the eldest daughter has thrown herself away already. She is not quite seventeen, and is soon to be married to an idle reckless fellow, one of her brother's associates, and her mother says "it is as well as Susan can be expected to do; she's always lived in the woods ever since she was eleven years old; she haint had no chance to be anybody, and can't expect to marry a lawyer or minister; and if Jake likes her well enough to clothe and feed her, it will be taking so much off her father's hands."

O mother! mother! should your eye chance to fall on this page think well before you turn from it—think of your own past toilsome, but aimless and unblessed life—think of the hours and days and weeks of idleness that should have been devoted to self-improvement, to the education of your children, to training them to a higher destiny than that to which you have consigned your daughter! You cannot undo what is done, you say, and her life will be no worse than yours. No worse! Heaven grant it may not. But there are others looking up to you, shall they, too, go on through life in the same weary, helpless path that you have trod! If not for your own sake, yet for theirs break the fetters that have bound you so long. Teach them something better than to "live to eat." A woman and a mother, show yourself worthy of the age in which you live. Father, you may help too! You *must* help, or nothing can be done. Arouse yourself and learn to live before you die. If you have not time to make a fence between your garden and cornfield, to put your wood-pile in the right place, or a bucket in your well, at least try to do something for those young immortal minds entrusted to your care. Your neighbor's table is covered with newspapers from which his children are gathering knowledge and keeping pace with the progress of the age; you have not *one*, and you are as able to have them as he. Have your children no taste for reading? Look at the anecdotes and scraps of poetry your little daughter has cut from your neighbor's refuse papers and pasted on the wall! They surround the old looking-glass like a halo of intelligence. All the pictures and capital letters she has given to her little brothers, and see what a menagerie they have made on that rough board partition, each animal carrying the initial letter of his name on his back! Does all this mean nothing? Is there no chance for these little ones to "be anybody because they live in the woods?" If you are too far gone in your old ways to reform yourself and teach them as a father should, open your doors to the Messenger-birds and Carrier-doves which alight as readily in the wild-wood Cottage as in the City Mansion.

Bring newspapers into your houses and your children will teach themselves.

Fathers and Mothers of such families! as you hope for the future usefulness and happiness of your offspring, set them examples of industry, order and economy, and by all means in your power encourage and strengthen each budding germ of intelligence.

Newspapers are cheap and plenty, and good ones too; give them to your children that on them their minds may travel out over the world and learn better than you have done, the object of life and the end for which they were created.

RECIPE FOR A LADY'S DRESS.—Let your earrings be Attention, encircled by the pearls of Refinement; the diamonds of your necklace be Truth and the chain Christianity; your bosom-pin Modesty, set with compassion; your bracelets be Charity, ornamented with the pearl of Gentleness; your finger-rings be Affection, set round with the diamonds of Industry; your girdle be Simplicity, with the tassels of Good Humor; let your shoes be Wisdom, secured by the buckles of Perseverance.

Farmers among Fashionable Young Ladies.

SHERMAN, Mich., March 15, 1853.

Mr. ISHAM—*Dear Sir:*—I have been for a few months past a reader of the *Michigan Farmer*, and can say with many others that I have derived much instruction from it. The columns of the "Ladies Department" seem to be well filled, but I suppose that you can find room for more communications, and *I* have taken the *rather foolish* idea into my head that I can write *something* which you might possibly think worth publishing.

A few months ago I returned from a boarding-school in New York State, where I spent some sixteen months. While there I devoted a portion of my time to studying the *character* of some of my companions. I discovered that the idea was very prevalent among *some* of them, that *Farmers* were a lower class of people than Merchants, Lawyers, &c., and consequently not fit to associate with them. This led me to inquire what they would do if it were not for farmers? The reply was, that of course they were *necessary:* they must have something to live upon, and farmers raised *that something*, and, as a natural consequence could not do without them. But, who among them would be willing to *marry* a farmer! Why, the idea was preposterous! What, *I* marry a *farmer*, whose hands are like horn, and face as brown as a *Johnny-cake?* Not I, indeed! My father is a *merchant*, and do you suppose *he* would be willing to see his daughter wedded to a tiller of the soil? No!

"But is not a farmer's profession a great deal more independent than that of a merchant? Do they not raise their own grain, make their butter and cheese, and raise the fruits, which if you were deprived of you would consider the greatest piece of cruelty in the world?"

"Why, yes, I'll admit all that; but do you think an accomplished lady ought to choose a husband of that profession in preference to all others? For what does a farmer's wife need to be an educated lady? Of what use would her French, Italian, or German be, or her Piano, Harp, or Guitar towards making butter and cheese, doing housework, and all such drudgery?"

"But, my friend," said I, "you surely do not call *such* work 'drudgery?' *I* think it a very agreeable way of spending a portion of one's time. But let us take a peep into imagination's realms. We will suppose you to be a farmer's wife, living happily and contented with the husband of your choice. It is evening. Your husband, after the labor of the day is ended, comes in to spend the evening with you. 'Come, Alice,' he says, (after the tea-table is cleared away,) 'will you not sing one of my favorite songs?' Gladly, and willing to please your husband; you place yourself at the piano, and sing those songs he loves the best. Thus with singing, reading, and useful conversation the evening passes pleasantly away. Your husband commences his labor on the morrow, strengthened and invigorated by his pleasant evening and good night's rest; and, anticipating the evening's comfort and enjoyment, is content to make himself useful to himself and to others in the sphere in which he has been placed. You commence your household duties with pleasure, happy in being useful, and in contributing to your husband's enjoyment.—Now is not this a pleasant picture of a farmer's home, which I have sketched for you?"

"Oh yes," she replies, "it will do very well for one of your taste; but for my part I don't like farmers, so let us drop the conversation."

This, I am sorry to say, is not an uncommon conversation among school girls. They are taught to look with contempt upon farmers—this most useful class of society. For my part, I think a farmer's life the most useful, and by far the most pleasant of any; and I do sincerely hope they will soon be appreciated as they ought. It will teach *coxcombs* and *fashionable young ladies* to depend on something else beside good looks, dress, and *father's purse.*

Very respectfully, yours, &c., E. C. B.

A Word to the Young Wife.

A responsible position indeed is yours. The happiness of at least *one* heart, for not only time, but a never-ending eternity, rests in a great measure at *your* disposal. It is yours to elevate and ennoble that manly heart, or to break and crush it to the earth. Oh how great must be his disappointment, if, instead of the amiable and loving wife he supposed he had obtained, he finds when too late for repentance that he has bound himself for life to one that is just the reverse from what he expected. We can imagine, but not describe his sorrow, when dreams of wedded felicity are thus blasted. Happy indeed will it be for yourself, as well as for him, if you neglect none of those *little attentions* in order to promote his happiness, that are so easily performed for those we love, and which constitute the pleasures of everyday life. Has he been unfortunate, who should be the one to whose sympathies he can look for consolation? or if he has been absent, who should be the *first* to welcome him back to a peaceful and a happy home? And is not the heart of any husband made to rejoice, and his face to beam with smiles, to find, as he returns to his dwelling, after the toils and cares of the day are past, his young wife cheerful and happy, the snowy cloth already spread for the evening meal, with the delicious tea, and nice white cakes she has made with her own hands. But if, instead of this, he returns to find her fretting, and blaming *him* because she has not everything as nice and convenient as others, who have perhaps labored and toiled for many years, is it any wonder that she is often left during the lonely evening hours to fret it out *alone*, while he either seeks the company of some more agreeable companion, or, which is more frequently the case, enters the bar-room, there to drown his sorrows in the sparkling bowl. O, if we were but as eager in trying to promote the happiness of those who are near and dear to us, as we are in trying to secure our own; if we could only forget self, and live to benefit them, and be as kind and obliging as we shall wish we had been, should we ever be called to watch by their sick and dying beds, then would this be a far more happy world than it now is; rumsellers would, I think, get less custom, and *divorce cases* would be less frequent.

Each heart that on this earth doth dwell,
Does its own sorrows know full well;
But pleasant words, in kindness spoken,
Often heal a heart once broken.

ELLA.

A Herbal.

A Lady writes to us to ask what is the best method of preparing and preserving a collection of dried plants as specimens for her own use. In answer, we give the method usually adopted by those who make collections. The first requirement is to get the plant which you wish to preserve into as flat and also as natural a form as possible; then place it on some kind of paper that will readily absorb all its moisture, like stiff white blotting-paper, (glazed or sized paper will not answer,) and laying a sheet of the same kind of paper over it, place on the top of it for a day a slight weight, like a quire or two of paper. After the plant has been in that pressure twenty-four hours, take it out and put it on new paper of the same kind, taking particular care to have every leaf smoothed out in the position in which it is intended it shall remain. Put another sheet on the top of it again, and then submit it to a heavier pressure between flat surfaces than was applied the first time. After letting it lie for some eight days in this paper—which it is well to examine occasionally, and if the plant is very succulent, the blotting or absorbent paper ought to be changed as often as may be found necessary—the plant may be taken up and put on the sheet of white paper, or on the leaf of the book where it is intended to remain. To fasten it to the white paper where it is finally to remain, a thin solution of gum arabic is about as good a substance as can be used.

Books thus prepared are called *herbals* or *herbariums;* and the only way in which botany can be thoroughly acquired is by taking any plant that may grow round the door-yard, and having thus prepared it, one may study out its different parts at leisure, returning to it just as often as the least doubt arises as to what family, or genus, or species it belongs to, and making a thorough analysis of its various parts, from the roots to the topmost leaf or flower, writing the description of each part over and over again, till you obtain a familiarity with the various names of each particular part into which botanists divide it. Besides acquiring a thorough knowledge of that one plant thus, it will be found, if the study is steadily pursued, that a good thorough fundamental knowledge of the whole natural family to which that one plant belongs will have been gained, so that you will be able to classify any plant you may meet with of that particular genus wherever it may be met with. This is the mode recommended by the most distinguished botanist in Great Britain, Professor Lindley, and we know it is the only way, with the aid of Professor Gray's or Professor Lindley's elements for reference.

A Letter from Home.

Mr. Isham:—You request farmers' daughters to write and help to sustain the Ladies' Department; and although the last number presents an array of talent creditable to the authors, and at least satisfactory to the Editor, there is often an "ebb" immediately succeeding an unusual "flow." Should this happen to be the case, a few words from me might be acceptable, though far less graced with new ideas, or beauties of diction. So, Mr. Editor, supposing myself well acquainted with you and the numerous readers of your paper, I will make my best courtesy, throw off my bonnet, smooth my apron, and sit quietly down to have a little chat of home. And now, let me introduce you to our own little home—not that we have much to show, but we may find enough to occupy us for a few moments. And first, you shall hear of our family. Father and mother are getting old, to be sure, but then here is my brother of 23 and myself of 20 years of age; and here is my little rosy-cheeked younger brother growing up; and we all know how to work; so, if we have health and prosperity, we shall get along very well. You will like to see our farm, I suppose; well, it is but small, and therefore the sooner shown. It was very low and wet when we first settled here; but by dint of patience, hard labor, &c., we have now got quite a nice little farm. There, on the west end, lies the wood lot; on the south side is pasture; while here, north and east, is our tillable land. The soil is not adapted to raising wheat; but potatoes, oats, corn, beans, peas, and the like, with most kinds of garden vegetables, well reward the farmer's care. As for our garden, we have not done much work in it this spring, the season has been so backward.

But here we are at the house: come in; it does not look very inviting, I know, for it is the same old log-house you would have seen if you had visited me several years ago. But look just there: you see we have a framed-house building, which may make a more stylish appearance, and be more comfortable; but do not despise the old log-house, I charge you, for there is not even a crack or a corner in it, uncouth as it looks, but is endeared to me by some remembrance. It has sheltered our loved ones through the storms and suns of many seasons. It has witnessed the privations and difficulties incident to a settlement in a new country; and long will it be ere I forget our old log-house.

I cannot invite you to look at my flower-garden this season; for although I love Nature's symbolical gems well, I have for some seasons past been pursuing an avocation that has rendered it impossible for me to cultivate my flowers. I have been engaged in the arduous though pleasing task of teaching common school, which I will allow is as much to my mind as household matters.

Farmers' daughters must also have some recreation, and I will suggest the idea that an hour of leisure employed in reading the *Farmer* is not thrown away. Hoping to greet you often, dear readers of the *Farmer*, I bid you adieu.

ADELIA.

REDFORD, 1853.

Tight Lacing.

"Listen, listen, Ladies gay"
No haughty feat of arms state we,
But sad the note and slow the lay
That mourns the lovely Virginie.

A French correspondent of one of the Boston papers writes the following:

"She was twenty-two, and she died! At the last ball of the Hotel de Ville every one remarked an elegant lady, in white brocade, embroidered with gold, who was excessively pale, notwithstanding the heat of the ball-room. All the ladies envied her wasp-like waist; you might have spanned it with your hand. She is dead! The family of Mme. Virginie de T**** determined to have a post-mortem examination of the body, so sudden and unaccountable was her death. The surgeon's scalpel revealed the mysteries of that pallor, of that waist, of that death. Three sides of her liver were found to have been forced in. By what?—her corset.—She is a victim of tight lacing."

EDUCATIONAL.

Embarrassments of Female Teachers.

There are many difficulties which female teachers encounter in keeping district schools, especially in the winter, of which not the least is the maintaining of proper order, when many of their pupils are large boys

It is at present universally admitted, that teaching is a vocation for which the female mind is well adapted. But there is still a prevailing sentiment that they are not suitable instructors for boys who have got a little beyond their 'teens,—that it is degrading to a boy, beneath his dignity, to remain under the tuition of a woman after he has grown to exceed her in size and strength.

When the pupil entertains such an idea, it cannot fail of influencing his deportment, in a manner very troublesome to the teacher.

It is sometimes said that there is an *incongruity* in placing a female teacher over large boys, or young men; that they (the boys) feel it, and that it is not to be expected that they will reverence her authority as they would that of a male teacher.

Does not the expression of such sentiments indirectly encourage unjust disrespect and contempt?

If women are qualified to instruct, in the various branches of study which young men wish to pursue; why should the community continue to foster a sentiment so disadvantageous to those who aspire to rise in their profession as teachers?

If the sentiments were analyzed, no reason would be found in it; but its vital element would be discovered to consist in that principle of despotism—"Might makes right."

Now it would be much more becoming the dignity of a rational intelligent being, to be governed by a sense of right and propriety, than by brute fear.

It seems to me that the common manner of remarking upon disorderly conduct at school, is directly calculated to encourage misbehavior, whoever may be the teacher. It is spoken of as something for which the teacher is entirely responsible. The idea is carried, that if a scholar elude the vigilance of his teacher, it is the teacher's fault. He is in effect taught that whatever he *can* do he *may* do. DORA DOUGLASS.

Teachers' Trials.—No. 2.

Now comes the perplexity of arranging the School into classes. If before things looked dubious, how must they appear now? Here are from twenty-five to sixty pupils with (perhaps) half as many varieties of books; (if they are so fortunate as to have books at all;) many of which are wholly unsuited to the capacities of their respective owners. Here is one with "Porter's, or "Parker's Rhetorical," who should have the childish tales of a "Second Reader." Children (infants) with the spelling book, filled with to them unmeaning words, who should have the First Primer with its pretty plates and little stories suited to their capacities; Some disdaining the Spelling book who cannot write a word without mispelling half the words, others scouting Mental Arithmetic who cannot tell what would be the cost of a pound of raisins, when five cents gets ¾ of a lb., becuse they are "too big for such trash."—In spelling, those who should have places in Second and Third classes, claim them in the First and Second, and will not take their appropriate position because they and their parents estimate their attainments by the class in which they stand, so the teacher is obliged to yield to their demands, and thus wrong the advanced class, or remove them to their proper position and thereby offend them and their parents. The teacher's judgment and conscience require that the measure of capacity be the true index to position, as well for the individual as for the general good. Yet should these principles be enforced the above mentioned class might either leave the school, or worse come with surly looks and angry words with which to contaminate the school. There is probably no greater mistake committed by parents in regard to their children's advancement in school than in crowding them ahead of their attainments.—I venture to say there is not one child in twenty that can ever become a good scholar who is thus pressed forward beyond the power of its intellect to sustain.

At last the teacher with achifig heart and weary brain, having, to the best that circumstances allowed, arranged the numberless reading classes, the varieties of Geography, Grammar, Arithmetic, Spellers, and perhaps two or three Philosophical and Algebraic works, and having classed as well as might be, the different degrees of advancement, is prepared for the routine of school labors. Mrs. E. P. F. B.

FLORAL HILL, June, 1853.

How Lapeer County Looks Forward.

MR. EDITOR:—Leaving for a time the tiresome routine of business, and the extensive compilations of the fathers of the Law, I will address the readers of the *Farmer* on Central Michigan, her history, her improvements, and her destiny. We have long lived without a market, subject to all the inconveniences that a new country exposes us to; smitten by adversity in those critical moments that seem to decide our destiny; we have toiled on through gloom, discouragement and disappointment till we have reached our present position in the great compact of Western communities; Detroit, our only market, girt about with low and thickly-timbered land, almost inaccessible from the clayey and muddy texture of her soil, afforded poor relief for weeks of hard labor spent in approaching her; and long years of poverty and wretchedness seemed inevitably to be the lot of our citizens. For a period, emigration to these counties almost ceased; persons designing to settle in the West located in more favored regions, though on inferior soils. But continued exertion, like faith, removes mountains. At one time our country seemed to rise like a giant, and the echo of the axe awakened every portion of the then unbroken forest. Railroads were projected and partly built, but an unfortunate excess in paper currency seemed to prostrate all our energies, and "hard times" made us the object of his special attention. The attention of our citizens had hitherto been chiefly directed to trade and speculation, and they felt severely the shock occasioned by the crush of our "Banking System;" money was scarce, provisions were hard to be obtained, and rose to enormous prices. Then, our inhabitants from necessity turned their attention to agricultural pursuits, and soon produced not

only sufficient for home consumption, but exported wheat in large quantities; and then our State began to rise slowly but surely in the scale of political importance. Plank roads are now common among us. Railroads have wound themselves along our hillsides and through our valleys; our markets have become more accessible, and our farmers now receive a fair price for their wheat and corn and wool. Possessed of a soil easily subdued and fertile, the whole interior of our State now resembles a great farm, interspersed with groves and crystal lakes, decorated with rural homes: the tree, the vine, the native simplicity seem to throw irresistable charms around country life. These homes are the scenes of pure enjoyment. Our pine forests, too, that buffet majestically the clouds, now yield to the hand of exertion, and form a prominent part of our country's wealth. But Agriculture, the great basis of our country's prosperity, thrives now more than ever. The farmer is becoming wealthy, and property in the country is not subject to the losses and changes of capital invested in business pursuits. Every succeeding year he adds new improvements to his farm, and thus almost insensibly becomes rich. His industrious neighbor also raises the price of his land, in connection with his own, and a few such farmers in one community, soon make what is styled a "favorable location" of the roughest and most inviting parts of our country. Our triumphs and progress thus far are truly encouraging; but a brighter day awaits us. Enterprise, which sprung from our own bosom, has projected and matured measures for the construction of a more direct and speedy outlet for our surplus productions. Railroads long in embryo are speedily to be built, and thus open between us and the world an avenue for commercial communications.

Our destiny we will consider at some future period, when our great resources have been more generally developed. Very respectfully, yours, A. C. M.

LAPEER, June, 1853.

Are the Farmers of Michigan alive to their Interests?

In the last number we mentioned the fact that some of the purest bred stock, and the most valuable animals ever introduced into the United States, were to be sold at auction by Col. Sherwood, of Auburn, New York, on the 8th of June. The sale has taken place; and while we are gratified to observe some of the finest and highest priced animals have been purchased by Western men, who will bring them to the West, yet we have not the pleasure of recording a single purchase by a breeder from Michigan. Ohio, Illinois, and Canada West have made purchases; and a citizen of Wisconsin, the youngest State of them all, has actually purchased the most valuable and highest priced animal offered, J. P. Robinson, of Wisconsin, having purchased Vane Tempest, a bull imported by Mr. Sherwood from the celebrated herd of the English breeder Mr. Stephenson, and from which he has bred many valuable animals, but which he now has parted with to make room for other crosses. Another feature about this sale of cattle is the fact, that every animal, with two exceptions, was sold at prices a good deal in advance of the prices at which they were set up.

The following is the list of the cattle, with the prices and the names of the buyers.

	SET UP PRICE.	SOLD FOR	PURCHASER.
COWS.			
Pansey, 3d	$300	$450	J. G. Brasee, Lancaster, O.
Pansey, 4th	300	525	P. Lorillard, West. co., N. Y.
Phantom	200	210	John J. West, Illinois.
Phantom, 2d	300	300	A. Clemens, Philadelphia.
Phantom, 3d	150	170	S. Bush, Sullivan co.
Ozema	200	240	John G Brasee, Ohio.
Ozema, 2d	150	165	J. W. Titus, Dutchess co.
La Polka	200	215	do. do.
La Polka, 2d calf	150	170	do. do.
Poppy	200	215	do. do.
Poppy, 2d	250	295	S. Bush, Sullivan co.
Nightshade	200	260	A. Clemens, Philadelphia.
Pet	300	310	J. W. Titus, Dutchess co.
Pet, 2d	300	400	William Kelley, Rhinebeck.
Pet, 3d	150	300	John Foster, Upper Canada.
Nymph	200	220	W. S. Ward, Westchester.
Topsey	150	160	J. G. Brasee, Ohio.
Sarah	110	125	H. Fellows, Sennett.
BULLS.			
Vane Tempest	1000	1070	J. P. Robinson, Wisconsin.
La Fayette	300	310	do. do.
Gen. Putnam	300	300	J. J. West, Illinois.
Powhattan	300	310	H. Bailey, Westchester co.
Novelty	200	215	J. P. Robinson, Wisconsin.
Petrarch	300	400	J. G. Brasee, Ohio.
Pope	200	230	J. P. Robinson, Wisconsin.
Dragon	100	130	A. Beach, White Plains.
Dandy	150	170	J. P. Robinson, Wisconsin.
A. Beach	100	135	A. Beach, New Jersey.
Loco Foco, calf	75	90	do. do.

11 Bulls and Calves $3,360
18 Cows and Calves 4,740

$8,100

Honor to the Plow.

'Though clouds o'ercast our native sky,
And seem to dim our sun,
We will not down in langor lie,
Or deem the day as done.
The rural arts we loved before,
No less we cherish now;
And crown the banquet as of yore,
With Honor to the Plow.

In these fair fields where peaceful spoil
To Faith and Hope are given,
We 'll seek the prize with honest toil,
And leave the rest to Heaven.
We 'll gird us to the work like men
Who own a holy vow,
And if in joy we meet again,
Give Honor to the Plow.

Let Art, arrayed in magic power,
With Labor, hand in hand,
Go forth; and now, in peril's hour,
Sustain a sinking land.
Let never Sloth unnerve the arm,
Or Fear the spirit cow;
These words alone should work a charm—
All Honor to the Plow.

The heath redress, the meadow drain,
The latent swamp explore,
And o'er the long-expecting plain
Diffuse the quickening store!
Then fearless urge the furrow deep,
Up to the mountain's brow,
And when the rich results you reap,
Give Honor to the Plow.

So still shall Health by pastures green
And nodding harvest roam,
And still behind her rustic screen
Shall Virtue find a home.
And while their bower the Muses build
Beneath the neighboring bough,
Shall many a grateful verse be filled
With Honor to the Plow.

Blackwood's Magazine.

BOOKS, PAMPHLETS, &c.—We have received during the past winter copies of Pitt's description of his Agricultural machines.

The charter, ordinances and regulations of the New York State Agricultural College, have been received from B. P. Johnson, Esq., Secretary of the N. Y. State Agricultural Society.

☞ The best way to curb a wild young man is, decidedly, to *bridal* him.

The Weeds and the Weevil.

BY WAYNE.

I noticed some time ago an article in an agricultural journal congratulating the farmers of Michigan on their freedom from the above named pests. I wish that there were just grounds for these congratulations, but the writer must have had little knowledge of the extent of the evils to which he referred.

I do not take up my pen, Mr. Editor, for controversy, but to call attention to the truth. Weeds of the very worst description are amongst us, which it will need all the skill and industry of our most staunch farmers to keep down so that they will not overrun our most valuable lands. For instance I call your attention particularly to the *Red Root* or *Pigeon Weed*, a plant which many of us farmers would gladly see a long way off our farms.—Canada Thistles do not compare with it, although they are not at all desirable. They are also multiplying rapidly amongst us.

The worst enemy of the Michigan farmer, however, is the *Cecidomyia tritica*, or Wheat fly, common called the weevil, which is amongst us to some degree, and has been since 1846 and 1847, they commit more destruction than any other pest known to the writer of this article. They are marching westward, committing their ravages as they go along.

The name weevil, I think is incorrect, as they do not come under the usual descriptions given by naturalists of the black or white weevil, neither do they agree with that given of the midge or wheat fly. The nit or egg, I think is left in the straw, chaff or in the ground, and is hatched out the following spring, when the product is ready to begin the work of destruction, at the time the young grain has attained one-fourth or one-half its size. I have found its ravages the worst on the bald varieties, the bearded appearing to suffer much less, the mediterranean appearing to suffer the least. Late sown wheat also suffers much more than the early sown. The insects make their appearance soon after the blossom appears on the wheat plant, in the spring.

The only known remedy is sowing early, and sowing such varieties as are at least liable to be attacked by this insect. It would be a good thing if some of our farmers would turn their attention to this insect, and watch their habits and their changes from nit to fly. I have got so now that I think I can detect their work from those of any other of the enimies of the wheat fied, and I shall continue to watch the "*varmint*," unless some change comes, and it passes off and is seen no more.

Wool Growing.

MR. EDITOR:—I would like to say a few words through your valuable paper on the wool-growing system of this State. It is evident to me that nearly all our farmers, when reflecting on this important subject, cannot help admitting that they have not paid as much attention to this subject when they just entered upon their business as it deserved. Wool-growing I regard as one of the most important of matters pertaining the farm; because when properly pursued, it both feeds the farmers purse and enriches his land. The farmers of the western States have too long neglected this important interest, while great weight has been given to their choice of horses, of cattle, and of hogs, the breeding and raising of the most profitable sheep have been neglected. I mean that too little attention has been paid to which variety of the fine-wooled sheep it was most to the interest of the farmers of this State to raise. I have now a few words to say relative to the disputed advantages of the two kinds, Merinos and the Saxons.

In regard to the Saxons, I believe it will be admitted as a general rule, that they are of a moderate size, slender constitution, and that without the most careful keeping they will not average much over two pounds of wool a piece; and that with good care and the best of food, they may sometimes be made to reach two and a half to three pounds per head. That their wool is the finest in the world, and that it will command at least ten per cent more money in market, is admitted, but it is doubted if these good qualities make up for the risks which the farmer runs from their delicate constitutions.

On the contrary the Merinos are a tough, hardy healthy sheep, that will subsist and keep in good condition on coarse and indifferent feed. With poor keeping they will clip from four to four and a half pounds; with good care, we have known a flock of from 50 to 100 head give an average of 5¾ to 6½ pounds per head. The texture of the wool is beautiful, and generally very fine, though not as fine as the wool of the Saxons, but we think the quantity, so far as profit is concerned, fully makes up for its difference in fineness to the farmer.

We have a great number of different kinds of sheep; some of them are very good, but I affirm that the great mass of those raised in this state are a dead loss to us, from the fact that when we come to strike a balance between the cost of the sheep and price we obtain for the wool, there is a loss which has to be made up in some other way off our farms. In this, I particularly refer to our native sheep. As the attention of a number of enterprising farmers are now called to this subject by the high prices which is obtained for wool, and especially fine wool, I would commend them to endeavor to improve their flocks, with the remark, that in doing this service to themselves, they will be putting money in their pockets.

BROOKLYN, April, 1853. C. W. CRAFTS.

Founder in Horses.

A correspondent, who writes a pretty hard hand to read, and signs his name C. P. B., gives the following as his management of foundered horses, which he is willing to warrant as a sure cure. He says he makes no secret of it, being willing to do what he can towards diffusing information among his fellow farmers. He says the founder is very common in his neighborhood, which is in Calhoun county, and the method he pursues to cure it is a follows: "When I find that my horse is foundered, I take four ounces of saltpetre, and two of soda, and dissolve and give it in a quart of warm water and a quart of strong beer to the animal. Previous to giving it, I ride him until he sweats freely. As soon the mixture is given to him I put as many blankets on him as I can procure, and ride him a mile or so on a good trot. In about an hour after, I give him two quarts of linseed oil, at one dose.—The horse is then ridden for a short distance again. By

carefully feeding, and treating him for a few days after this, a sure cure is effected."

The same correnspondent also says that he finds no difficulty in making the wildest colts follow him, by using them to come to him with a mixture made of two ounces of salt and two ounces of fine sugar, of which he carries a little in his pocket, and lets them lick it from his hand on all occasions, for two or three days, after which they will follow him every where.

Little May Wheat.

We find in the *Rochester* (N. Y.) *American* a description of a variety of wheat that seems to posses some desirable qualities. It is called the "*Little May Wheat,*" and is a white grain with a thin cuticle or skin, and very rarely weighs less than sixty-five pounds to the bushel. It is mostly grown in Georgia and in the southern States, and when sown in November it ripens in the climate of Augusta by the middle of May. When not sown till December, it is ready for harvest by the beginning of the month of June. It is this earliness in its ripening, or rather its quality of ripening at a low temperature which makes it a valuable grain. The White Flint, or the Soule Wheat when taken to Georgia, and sown there does not ripen nearly so early as this "Little May" variety, and the writer in the *American* suggests that as a few days gained in the ripening of a crop often saves it from the effects of rust, a trial of this "Little May" in these northern latitude might prove it to be a desirable kind for cultivation and for profit. Gen. Harmon, of Wheatland, New York, tried the "Virginia May," which is a coarser grain, but did not consider it equal to the White Flint, it is however a different kind from this Georgia variety.

Chloroform and Plants.—Dr. Leclere, a professor in the Medical School at Tours, in France, has been experimenting and making investigations relative to the nerves of flowers, and he finds that chloroform when administered to the mimosa or sensitive plant, renders the leaves of that plant insensible while the effect of the chloroform lasts.—When it passes off the plant becomes as sensitive as usual.

Rhubarb Pie.—Cut the large stalks off where the leaves commence; strip off the outside skin, then cut the stalks in pieces half an inch long, line a pie dish with paste rolled thicker than a dollar piece, put in a layer of the rhubarb nearly an inch deep; to a quart bowl of cut rhubarb, put a large teacup of sugar, strew it over with a spoonful of salt, and half a nutmeg grated; cover with a rich pie-crust, cut a slit in the centre, trim off the edge with a sharp knife, and bake in a quick oven, until the pie loosens from the dish.

Rhubarb pies made in this way are altogether superior to those made of the fruit stewed.

Bits of refuse wool tied to the stems and stalks of dahlias, are said to be an effectual preservation against earwigs, and a less unsightly one than pots on sticks.

Peach Borer—A Remedy.—The following remedy for this pest we take from the *Sandusky Register*, to which it was sent:

Messrs. Editors:—I see many remedies prescribed for preventing the ravages of the *Peach Borer*, (*Algeria exitiosa,*) going the rounds of Horticultural papers; but have never seen the following simple plan, which has always proved a specific with me, having practiced it for some fifteen years without losing a single tree by them. With a hoe remove a little earth from about the body of the tree, and put about a peck of *leached ashes* in its place, heaping them up a little above where the soil will ever come by *future* cultivation; then stamp them down firmly with the foot or with a spade. Nothing further will ever be required. The ashes seem to harden the bark of the tree where it comes in contact with them, so that the worm cannot or will not work in it. A. K.

Kelley's Island, May 6, 1853.

Cure for Rose Bugs.—A subscriber wishes to know if any one can suggest a method of preventing the yearly incursions of the rose bug; and having heard considerable complaint among our neighbors of having their cucumbers, grapes and other fruit destroyed by these insects, I will suggest a remedy. Plant in the centre of your garden a few damask rose-bushes, and they will never light on anything else. We have a large garden with almost every kind of fruit, vines, shrubbery, and flowers, with several kinds of roses, and in the centre we have four bunches of damask rose-bushes, and I never saw in the whole garden a rose-bug on anything but the damask rose. When they are in blossom, I go into the garden once a day with a pan of hot water, and shake the bugs from these roses into the water, and get about a pint at one time; this I practice for a few times and then they will disappear.—*Boston Cultivator.*

Candles, how to make them of Lard.—We find in an exchange a recipe of great value to our subscribers in "the woods." It is for a new method of making candles: To twelve pounds of lard use of alum and saltpetre each one pound; dissolve the alum and saltpetre in a small quantity of water, then pour into the melted lard and boil the whole until the water evaporates. The mixture requires constant stirring to prevent settling in the bottom of the vessel. Candles made of this composition are equal to the best tallow, and last some longer.

☞ The goodness of a soil depends upon its being able to retain the quantity of moisture which is proper for the nourishment of vegetable life, and no more.

☞ All animal and vegetable matters must undergo fermentation and decomposition before they can be absorbed by the tender roots, termed the mouths of plants.

The Markets.

DETROIT, June 27, 1853.

CATTLE—Good fair cattle, such as are brought into this market to sell, are worth 3½ a 4 cents, but the latter price is only paid for very choice animals, which are scarce. The New York prices are, for prime extra 8 to 9 cents; for second quality and common, 6, 6½ and 7 cents is the range.

The Chicago prices are about the same as the Detroit quotations.

SHEEP—Range now from $2 to $4 per head: a flock of 75 head from Hillsdale, in this state, sold in Chicago last week at $2 84 per head, fleece off.

CALVES—From $2 to $4, according to size and condition.

LAMBS—Sell from $1 50 to $2.

HOGS—Good choice Hogs for pig pork are worth $6, and some are bought at a little less.

PORK—Good mess Pork is not worth over $15 50 per barrel in this market. The New York quotations are not quite so good, but remain nearly the same.

HIDES AND SKINS—Hides are selling at 4 cents; Calf Skins 7 a 8c; Sheep Skins, shorn, are worth 1s a 1s 6d.

EGGS—Bring 10 cents per dozen for fresh, but a good many are coming into market that are not in very good condition. Out of a lot of 300, sold the other day, 100 were thrown away.

POULTRY—Not plenty. Small spring chickens sell for 2s 6d to 3s per pair; old ones for 5s. Turkies 10s a 16s.

BUTTER—Is plenty, and good fresh roll is worth 14 cents. Firkin 11 to 12½, according to qualities.

FLOUR—There has been some little rise since our last quotations, and it got up to $4 25 for a little while, but at present sales are light at $4 12½, and the amount on hand is not much over 6,000 barrels.

WHEAT—Good white wheat has sold as high as $1 in this market, from wagons, and has been down to 95 since last month. At present it sells for 98 cents. There has been within a week a slight advance in New York, owing to the foreign news bringing intelligence of an advance in Liverpool and London. The price in New York is quoted at $1 20 to $1 22 for Michigan white.

CORN—Sells here, principally for retailing, at 56 cents. In Chicago it is quoted at 48 a 50 cents by the cargo.

OATS—Retail here at 42 cents, and are not plenty.

RYE—None selling here.

SALT—Sells for 12½ cents per bag. Barrels of fine are worth 11s.

PLASTER—Oswego per bbl is $1; Grand Rapids 12s; and the Detroit Mills sell their fresh ground at $7 per ton.

SEEDS—There is little demand for seeds of any kind at present, and they are not quite so high as quoted last month.

POTATOES—Great quantities of the potatoes now sold in this market come from other States, and bring from 37½ to 40 cents per bushel.

WOOL—During the past three weeks the wool market has been pretty brisk in this city, and there have been sold here about 170,000 pounds, at an average rate of 46 to 47 cents per pound. The prices have ranged from 38 to 60 cents, and in one or two cases, where the lot was very fine, there was probably a cent or two more paid. These prices have been fully equal to the New York, Boston, Providence and Troy rates, and better than has been paid any where at the West. We are enabled to say this from an examination of the market every day since the first clips have been brought in. The quotations have slightly declined since. At present they are as follows:

Common native fleeces	38a40
Good native and ¼ blood	40a44
Half and three-quarters Merino	44a50
Full-blood Merino	50a53
Very choice Merino and Saxon	54a60

RECEIPTS.

Cash received for *Michigan Farmer* from May 12 to June 23, 1853: R Blackmar $1, Lewis Bonham $4, B Woodruff $1, D E Cranston $3, B Brewer $1, E N Shedd $1, John A Pitts $2, E Sales $1, D C Waterman $2, N Tenny $1, E M Kingsbury $3, Margaret Moody $1, A F Hayden 1, A Hibbard, $2, H C Burlingame $1 50, D Hoyt $5, D N Montague $2, R B Perry $4, F M Drake $1, E Fishpool $1, D N Willard 50 cts, A Wakeman 75 cts, H L F Gavet $1, H Padley $1, H Wing $1, T E Streeter $1, J Sprague $2, H Vollent $1, E Jones 75 cts, H H Sibley $1, L Beach $3, H Blakesly $1, J Miller 50 cts, Thos Price $1, W C Smith, $1, J Mullett $1 50, T Mosely $1, Geo Talbot, $1 37, B K Dibble $1, A Gray M D $2, E M Stickney $4, S B Brown $1, E La Grave $1, T Barker $1, A Hoag $2, L Conant $1, J Stringer $1, T Vreeland $2, S Raymond $3, A B George $5, H Alexander $1 50, H NBall $1, A B Hadsell $1 5½, D Cummings, $1, W Manning, $2, J J Hamilton $2, L Lardner $2, S B Cook, 75 cts, M T Bennett 75 cts, A Clark $1, E H Johnson $6.

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NEW YORK CRYSTAL PALACE.

NEW YORK, May 31, 1853.

THE DIRECTORS of the Association for the Exhibition of the Industry of all Nations, give notice that the Exhibition will be opened on the 15th day of July.

In making this announcement, the Directors avail themselves of the opportunity to state that the building which they have erected, and the Exhibition which they have prepared, will, they believe, fully meet the just expectations of the public.

It is proper that it should be known that, in order to afford ample scope for the inventive talent and skill of our countrymen in machinery and agricultural implements, we have increased the size of the building by adding nearly one-fourth to its area, beyond what was originally contemplated, so that we have now for the purposes of exhibition two hundred thousand square feet, or nearly five acres.

Not limiting their plans to a display merely curious or attractive, the Directors have organized a department of Mineralogy and Geology, in which some of the best scientific talent of the country has been employed; and the foundation is thus laid of a most valuable national collection of the mineral resources of the country.

The Directors had hoped to open the Exhibition at an earlier period, but the novelty and intricacy of the style of construction, and the high standard of architectural beauty which it has been the object of the Association to attain, have produced delay, and it has been impracticable for the Directors, notwithstanding their utmost vigilance and their most earnest desire, to announce the opening at an earlier day.

In regard to the general character of the Exhibition, the result promises to be most gratifying, and not unworthy of the confidence manifested towards it by the Government of the United States—a confidence which has elicited a cordial response from the governments of foreign countries. It will, unquestionably, be the most attractive and interesting collection of the works of art, the results of science and the productions of industry, that has ever yet been made in this country, and will tend to increase the active emulation of the age in every branch of intellectual development.

The sole charge of the interior of the building, its division, arrangements, classification and police, has been confided to two officers of the Navy of the United States, Captain S. F. Dupont and C. H. Davis; and the sanction of the Government given to the appointment of these gentlemen, who have so much distinguished themselves in the special services in which they have been employed, affords proof of the confidence reposed and the interest felt by the highest authorities of the country, in the general objects of the enterprise.

These gentlemen have organized their department as follows:

J. M. Batcheider—Secretary of the Superintendent;
Samuel Webber—Arrangement of Space and Classification;
Prof. B. Silliman, Jr.—Mineralogy and Chemistry;
B. P. Johnson—Agricultural Implements;
Joseph E. Holmes—Machinery;
Edward Vincent—Textile Fabrics;
Felix Pietti—Sculpture.

The Official Catalogues and the Illustrated Weekly Record of the Exhibition are to be published in the building, by Messrs. G. P. Putnam & Co., under the supervision of the Association.

The Directors have sensibly felt the confidence reposed in them by their fellow-citizens in all parts of the country; and they will continue to make every effort to satisfy their just expectations.

DIRECTORS:

Mortimer Livingston,	Philip Burrows,
Alfred Pell,	Johnston Livingston,
August Belmont,	Charles W. Foster,
Alexander Hamilton, Jr.,	Theodore Sedgwick,
George L. Schuyler,	William W. Stone,
Elbert J. Anderson,	William Whetten,
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W. C. H Waddell,	William Kent,
Jacob A. Westervelt,	Watts Sherman,
James A. Hamilton,	F. W. Edmonds,

Samuel Nicholson.

THEODORE SEDGWICK, President.

WM. WHETTEN, Vice-President, Treasurer, and Secretary.
L. C. STUART, Assistant Secretary. jul

MOORE'S UNRIVALED WHEAT DRILL.

IMPORTANT TO FARMERS!

THE subscriber is prepared to furnish the farmers of Washtenaw, Oakland, Livingston and Wayne Counties with Lewis Moore's unrivaled Wheat Drill. It is enough to say of this Drill, that the highest premiums have been awarded it by several Agricultural State Fairs; also by a number of County Fairs in the States of Pennsylvania, Maryland, Michigan and others, over nearly every other Drill in use in the United States. It has been some improved, and is now got up in the most substantial manner for service and durability. I am now offering them at 25 per cent. less than any other in use, which places them within the reach of all. For further particulars address the subscriber, Ann Arbor, Mich.

jul3t T. A. HAVILAND.

GREAT SALE OF SHORT-HORN & DEVON CATTLE AND SOUTH DOWN SHEEP.

ON WEDNESDAY, the 7th day of September next, at 1 o'clock P.M., I will sell, at my farm on Grand Island, six miles below Buffalo, about 30 full-bred Short-horns, a few Devons, and about 30 high grade Short-horn and Devon Cattle, consisting of Cows, Heifers and young Bulls.

The young Short-horns are chiefly the get of my imported bull Duke of Exeter (10,152)—a bull not exceeded, as a fine stock-getter, by any bull in the United States.

The young Devons are the get of the bulls Candy and Quartley, both imported by Mr. Stevens. The superior of these bulls in blood, style and breeding is not to be found. Quartley is my present stock bull.

I will offer at the same time 50 pure bred Southdown Sheep—rams and ewes; also, a few Middlesex Pigs—both sheep and pigs the direct get of imported sires, from dams descended of late importations.

Catalogues will be ready by the first of August, and will be sent, on application to me, by mail.

TERMS—All sums of $100 and less, cash. For larger sums, approved notes at four months, with interest, payable at bank, will be received, if preferred.

A steamboat will carry all persons wishing to attend across the ferry to the farm at 10 o'clock on the morning of the day of sale. The stock can be viewed at any time previous by calling on me at my residence in this place. LEWIS F. ALLEN.

Black Rock, N.Y., June 15, 1853. jul-3mo

BOOKS AND STATIONERY.

RICHMONDS & BACKUS would call the attention of their friends and the public to their large and well selected stock of

BOOKS AND STATIONERY,

which have been selected with great care, both as to quality and price, which we now offer at as low rates as can be sold in this market.

Our stock of paper is very large, enabling us to furnish Counties and Banks, Merchants and Shippers, Lawyers and Doctors, Mechanics and Farmers, with every style of Paper and Blank Books required to conduct their respective business.

We have increased our material and facilities for binding Music, Periodicals, Miscellaneous and Old Books. All work done promptly, and with neatness surpassed by none.

RICHMONDS & BACKUS.
Desnoyers' block, cor. Jefferson ave. and Bates st.
jan1853-1y

THE WATER-CURE JOURNAL.—A New Volume. Now is the time to subscribe. Pulished monthly in a beautiful quarto. Illustrated with engravings exhibiting the Structure, Anatomy and Physiology of the Human Body, with familiar instructions to learners. It is emphatically a Journal of Health, designed to be a complete Family Guide in all diseases.

TERMS—Only One Dollar a Year, in advance. Address, post-paid, FOWLERS & WELLS, Clinton Hall, 131 Nassau street, New York.

"The Water-Cure Journal holds a high rank in the science of health: always ready, straight-forward and plain-spoken, it unfolds the laws of our physical nature without any pretensions to the technicalities of science, but in a form as attractive and refreshing as the sparkling element of which it treats."—*New York Tribune.* jul4m

THE ILLUSTRATED AMERICAN PHRENOLOGICAL JOURNAL: Devoted to Phrenology, Physiology, Mechanism, Education, Agriculture, the Natural Sciences, and General Intelligence; Profusely Illustrated with Engravings.

Every family, and especially all young men and women, should have a copy. Published monthly, at One Dollar a year. All letters should be post-paid, and directed to FOWLERS & WELLS,
Clinton Hall, 137 Nassau st., New York.

Young men about launching forth upon the activities of life, and anxious to start right, and understand their course, will find this JOURNAL a friend and monitor, to encourage them in virtue, shield them from vice, and to prepare them for usefulness and success in life. The various occupations will be discussed in the light of Phrenology and Physiology, so that every one may know in what pursuit he would be most likely to succeed.—PUBLISHERS. jul4t

Rogers' Patent Wheel Cultivator.

WE would intimate to the Farmers of Western Michigan that we are manufacturing Rogers' Wheel Cultivator, and are prepared to show, by recommendations in our hands, and the testimony of all who have used it, that as an agricultural and labor-saving implement it has no superior.

This machine has taken the Premium at several State Fairs in the States of New York, Ohio and Michigan, and at all the County Fairs wherever exhibited. We are, this season, selling these machines at a reduced price. We would invite farmers to give it an early examination, and to forward their orders soon.

At our Foundry and Machine Shop we are also manufacturing Corn Cultivators, Macomber's Straw Cutter, Corn Shellers, Plows of various kinds, Steam-Engines, Mill Gearing, and castings in general on reasonable terms. A. ARMS & CO.

Kalamazoo, June 18, 1853. jul2t

BOOTS AND SHOES!

THE GREAT COMMOTION IN DETROIT!!

IS CAUSED BY THE OPENING OF THE

MICHIGAN BOOT AND SHOE STORE!

WHERE SWIFT & SEYMOUR are now offering to the public a large, well-assorted and splendid stock of BOOTS AND SHOES,

of every variety, style and quality, far too numerous to mention, and suitable for the selection of

ANY MAN, WOMAN, OR CHILD,

And at prices so VERY low that they

CANNOT FAIL

to suit the most judicious purchaser.

We intend to make it for the interest of

EVERY PERSON

to call upon us before purchasing elsewhere; and we cordially invite ALL so to do.

OUR STOCK IS ENTIRELY NEW,

and being manufactured of the BEST materials, by most experienced workmen, selected with great care, and designed expressly for

OUR RETAIL TRADE.

We are prepared to give rare Bargains to those who favor us with a call, at T. K. ADAMS' OLD STAND.

Don't forget the MICHIGAN BOOT AND SHOE STORE, Jefferson avenue, First Block below Biddle House, and Second Block above Woodward avenue.

May, 1853-1y SWIFT & SEYMOUR.

NEW YORK CHEAP JEWELRY STORE.

NO. 55 WOODWARD AVENUE, DETROIT.

P. DURKEE & CO., successors to (H. B. Marsh,) wholesale and retail dealers in

WATCHES, CLOCKS, JEWELRY & FANCY GOODS,

have just received and opened, a splendid assortment of Gold and Silver Watches, Silver Ware, Jewelry, Clocks and Fancy Goods, which wil be sold cheaper than the cheapest.

☞ Watches and Clocks repaired and warranted. Mar'53-1y

"NO WAR, NOR BATTLE SOUND!"

BUT PENSIONS, BOUNTY LANDS, &C.

ALL widows of ALL officers, and ALL soldiers of the Revolutionary war, are (by an act of Congress, approved Feb. 3, 1853,) entitled to a pension "for life" of the same amount their husbands drew or would have drawn had they applied. Heretofore, none were entitled only those married previous to January, 1800. Widows and orphans who have drawn FIVE YEARS' PENSION, under Act of July 4, 1836, July 21, 1848, and Feb. 22, 1849, are entitled to "FIVE YEARS' ADDITIONAL PENSION." And all widows and orphans (under 16) who have lost a husband or father in any war since 1790, are entitled to five years' pension (if not received.) Every officer and soldier who has at any time been wounded, or i any way disabled, in the service of the U. S., and in the line of his duty, is entitled to Pension for Life, according to the degree of his disability.

BOUNTY LANDS.—Every officer and soldier who have served as long as "ONE MONTH" in any war of the U. S. since 1790, is now entitled to land, if he has not received it.

Applications for Pensions, Land, or pay of any kind, will receive prompt attention by application by letter or in person to

DAVID PRESTON & CO., Detroit, Mich.

P. S. We BUY and SELL 160, 80, and 40-acre warrants, and pay best rates. ap'53 1y

SMITH & TYLER,

MANUFACTURERS and Dealers in Boots, Shoes, Rubbers and Findings, Corner of Woodward Avenue and Larned Street, Detroit, Michigan.

We intend to have on hand at all times a full and complete assortment of goods in our line, both of our own and Eastern manufacture.

Mr. Smith gives his personal attention to all work of our own make, and we use the best leather to be had in the market, and therefore believe there is not better work made in the State, than we are getting up.

We invite all wishing to purchase Boots and Shoes to examine our Stock and prices before buying elsewhere, as we shall use our best endeavors to give entire satisfaction.

Remember our stand is corner of Woodward Avenue and Larned Street. jan-1yr SMITH & TYLER.

THOROUGH-BRED DEVONS FOR SALE

BY W. P. & C. S. WAINWRIGHT.

BULLS.—1. Uncas—Calved March 19, 1851.—First Prize as yearling at American Institute Show in October, 1852. Sire, "Meguntiecook;" grandsire, "Prince Albert (102); dam, "Nonpareille," by "Lord Lynedock."

2. Red Jacket—Calved May 5, 1852.—First Prize as calf at American Institute Show, 1852. Sire, "Meguntiecook;" dam, "Meadow-Lily," by "Baronet" (6); g. d. "Helena."

3. Oscеola—Calved Sept. 11, 1852.—Sire, "May-Boy" (71); grandsire, "Duke of York" (37); dam, "Moss-Rose," by "Duke of York" (37); g. d. "Nonpareille."

4. Dacotah—Calved Oct. 29, 1852.—Sire, "May-Boy." (71); dam, "Red-Bud," by "Meguntiecook;" g. d. "Nonpareille," by "Lord Lyndecock."

HEIFERS.—1. Rose—Calved October, 1849.—Bred by Mr. R. C. Gapper, Canada West. Sire, "Major;" g. sire, "Billy;" dam, "Cherry," by "Billy;" g. d. "Beauty." In calf by "May-Boy."

2. Gazelle—Calved October, 1850.—Bred by Mr. R. C. Gapper, Canada West. Sire, "Rob Roy;" grandsire, "Santa Anna;" dam, "Cherry." In calf by "May-Boy" (71).

These pedigrees run back to the best herds in England; "Meguntiecook," "May-Boy," and "Nonpareille" having been imported from the stock of George Turner, Esq., and "Helena" from that of James Quartly, Esq., by ourselves; while "Billy" and "Beauty" were imported by Mr. Gapper from that of Mr. James Davy.

☞ Animals delivered free of expense in New York or Albany. Our stock may be seen at all times on our farm, three hours from New York by Hudson River R. R.

*** The numbers in parentheses refer to the English Herd Book.

Rhinebeck, Dutchess Co., N. Y. jul3t

VALUABLE RECIPE FOR SALE.

A RECIPE for putting up PEACHES, so that they will keep for years as fresh as when first taken from the tree;—one of the most valuable recipes known for keeping this valuable fruit fresh. Below I give the names of men, as reference, who have eaten of them this spring.

Receipts $2. All orders accompanied with the cash promptly attended to. E. VAN SANCTT, Leoni, Mich.

Dr. J. S. Watts,	Leoni,	C. Hotchkiss,	Pontiac,
Ira Dillman,	"	C. N. Curtis,	"
T. Hand,	"	J. Wallace,	"
S. S. Brown,	Concord,	A. A. Angevine,	South Albion,
H. Nimocks,	Clinton,	J. Nearpass,	"
E. Clarke,	"	P. Nearpass,	"
Wm. Vaughn,	"	J. Tapan,	Salem. jul4t

Imperial Chittagongs and Shanghae Fowls.

I have a good supply of the above-named varieties of early chickens, which will lay in September, and I am selling them at lower prices than when full grown. They were hatched in March and April.

Imperial Grey Chittagongs, eight to ten weeks old, $6 per pair;
Chittagong & Shang., ½ & ½, " " " $5 "
Shanghae, " " " $4 "

Chittagong Eggs, $3 per dozen.
Shanghae and Chittagong Eggs, half-and-half, $3 per dozen.
Shanghae, $3 per dozen.
Three-fourths Chittagong, one-fourth Cuba, $1 to $1 50 p. doz.
Mixed blood, 50 cents.

The different varieties are carefully bred in separate apartments. I have received additions to my former stock from the Eastern States, to prevent any bad effects from in-and-in breeding. Orders attended to in rotation. Letters of inquiry answered promptly. Eggs packed and chickens cooped and sent to Express Office or otherwise.

N. A. PRUDDEN, 50 rods north Post Office,
jul1t* Ann Arbor.

CHICKENS FOR SALE.

THE subscriber offers for sale, early chickens, of the following varieties, bred from his premium stock and other choice selections of same variety, procured from noted breeders at the East, that pairs may be made not of the same strain of bloods, to prevent degenerating from in and in breeding. They will lay and hatch this fall, as was the case with my Shanghai pullets last year, viz: Gray Chittagongs; brown, white, and perly Shanghais; black and red Cochins; black Cochins and White Dorkings, ½ and ½, retaining the Cochin's size and brilliancy of plumage, beautifully mottled. A few Bramah Pootzes, at $6 per pair; colored Dorkings, just imported, and white Dorkings, at $5 per pair; Shanghai and Dorkings, ½ and ¼, at $4 per pair; Chittepatts, a variety that never set, and Sebright Bantams, (very small) at $3 per pair.

Persons may rely on such fowls as ordered, carefully cooped and delivered at Express office, or the money returned.

Orders will be filled according to date. M. FREEMAN.
Schoolcraft, Mich., April 14th, 1853. may1

HAT STORE.

ARMSTRONG'S HAT AND CAP EMPORIUM, No. 59, Woodward Avenue, (between the Presbyterian Church and Jefferson Avenue, sign of the Big Hat, Detroit.) Dealer in Hats, Caps, Furs, Robes, Umbrellas, Canes, Gloves, Scarfs, Suspenders, Buckskin Gloves, &c., very cheap for cash.

Would respectfully solicit the patronage of Farmers and others coming into the city, pledging himself to sell as cheap of any other establishment west of New York.

His stock of Hats and Caps are of his own manufacture and warranted the best. Orders for any style of hat or cap promptly attended to. ☞ Regalia and Jewels of the different orders constantly on hand. ☜ ly

New Book and Stationery Establishment.

KERR, DOUGHTY & LAPHAM,

PUBLISHERS AND IMPORTERS,

DETROIT, MICH.,

WOULD respectfully announce to the Book Trade in Michigan, Ohio, Indiana, Illinois, Wisconsin, and Canada West, that they have opened a Publishing and Importing Wholesale Book and Stationery House in this city, where may be found at all times a full stock of School, Miscellaneous, Law, and Theological Books, Standard Works, &c.

Also a full and complete assortment of English, French, German and American Stationery, Letter and Cap Papers, and all articles in their line, including Blank Work, Slates, Ink, &c.

From our advantages in publishing, we can procure our stock in exchanges with other publishers, and are enabled to sell at exactly Eastern prices, thus saving to our customers their freights from Eastern cities.

To Booksellers, Country Merchants, Pedlers, Colporteurs, Book Agents, and Teachers we will only say, try us, and we will satisfy all that we can furnish goods on as favorable terms as any house in the country. KERR, DOUGHTY & LAPHAM,

july Young Men's Hall, Jefferson ave., Detroit.

THE SUBSCRIBER having purchased a Colt from HILL'S celebrated horse Black Hawk, will keep him for service at his stable in Watervliet, Berrien Co., Mich., the present season.

Watervliet, June, 1853. [ju2m] ALONZO HYDE.

CLOTHING STORE.

EAGLE & ELLIOTT, Dealers in Clothing, wholesale and for the Million, keep constantly on hand as large a stock of Ready made Clothing as may be found west of New York. Being of Philadelphia manufacture, and well suited for this market, they are prepared to sell at low prices, at wholesale or in quantities to suit purchasers.—They beg leave to call attention to their New Cloth Ware Room, (second story,) French, Belgian, English, and American Cloths, Cassimeres and Trimmings, Serges, Satins and Vestings, making the best assorted stock of those goods to be found west of Buffalo; for sale, wholesale, or made to order at their Custom Department, where every satisfaction as to fit, style, &c., is warranted at reasonable prices.

jan-1yr EAGLE & ELLIOTT, 61 Woodward Avenue.

THE EYES! THE EYES!

DR. GEO. BIGELOW respectfully announces to the citizens of Detroit, and the public in general, that he is now engaged in treating various diseases of the eye to which this country is subject.

As an Oculist, he professes skill and experience, to which hundreds can testify who have been afflicted with the various kinds of Ophthalmia, or inflammatory diseases of the Eye, and have been by him perfectly cured and restored to sight, from years of blindness.—Dr. B. was himself afflicted with diseased eyes for ten years, and after several of the most celebrated Physicians and Oculists of the New England States, and New York, together with a multitude of "Never Failing Remedies" had failed, was cured and restored from blindness by the same treatment (administered by Dr. E. Leach, of Utica N. Y.) which he is now practicing with so much success.

Office 86 Jefferson avenue, a few doors east of the Farmer's and Mechanic's Bank.—Detroit, January 1, 1853. ly

STEVENS & ZUG,

FURNITURE AND CHAIR WAREHOUSE AND MANUFACTORY.

Below Michigan Exchange Hotel, on Jeff. Ave., Det.

WE are now prepared to offer to our numerous friends and the public generally, the Largest, Best, and most Complete assortment of Cabinet Furniture, Chairs, Matresses, &c., ever offered in this city. We have our large Warerooms well stocked with every variety of Furniture, from the Most Elegant and approved Style, both Ancient and Modern, down to the very Plainest. We have paid particular attention to the Manufacture of our Wares, especially to the Seasoning of Materials, which is one of the most important items in the Manufacture of Good Furniture. Our facilities were never so great as at present, for getting up the best of Furniture. We are prepared to Make to Order all the different styles of Gothic, Elizabethan, French and Plain Furniture, for those who wish it made to order.

All our good work is made under the immediate inspection of one of the firm, who is A Practical Cabinet Maker and Upholsterer, and devotes the whole of his time to that branch of the business.

To our old customers it is unnecessary to say that we make all our work in the very best and most durable manner, and as to style, all know that our patterns are sought after by all who desire to have a fashionable article, and all that is necessary to secure the credit of having extra fine furniture, is to say that it is of Stevens & Zug's latest pattern. It would occupy too much space to enumerate the articles we have on hand, and we will only say that we can furnish all that is wanted in the way of Furniture and Bedding.

We manufacture Matresses of all kinds, quality, size and price.—We would especially recommend our Hair and Husk Beds equal to any in the World.

Our Stock of Upholstering Materials is also very large, and comprises—

Brocatelle, Plush, Moquet Printed Lasuing, Damask, (both silk and worsted) Delaine, Tapestry, Hair-Cloth and Ventian Cords.

Ladies having embroidered work, can have it put on the latest style of modern, or the most antique chair frames; by superior Upholsterers, and at moderate prices. To all we say, give us a call and examine our goods, for we take great pleasure in showing them, and no offence when we cannot sell our wares. STEVENS & ZUG.

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